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ABSTRACT

Developed to help faculty teaching introductory courses in microeconomics, psychology, and sociology in colleges and universities incorporate existing knowledge about women into their course content and teaching practices, this report is organized into two sets of guidelines. The first, "Content Guidelines: Sex and Gender in the Introductory Course," is designed to provide easy access to summaries of current knowledge and key references, and is organized around topical outlines of curriculum areas typically included in the introductory course. Pages in this section are divided into three columns: (1) content or topical outline of the course; (2) summaries of relevant basic knowledge, research findings, and current areas of inquiry about sex and gender; and (3) discussion topics and possible assignments. Topics are cross-referenced to pages in the second section where a summary of information for a given curriculum course can be found. Intended to create a greater awareness of the ways in which sex bias and gender stereotyping occur through classroom interaction, the second set of guidelines, "Guidelines for Student-Faculty Communication," consists of two subsections. The first, "Student-Faculty Communication Patterns," identifies and discusses types of faculty interactions that may inadvertently promote ethnic or sexual bias. The second, "The Student Perception Questionnaire," is designed to provide faculty with student perceptions of the interactions occurring in individual classrooms. A bibliography of over 40 related references concludes the report. (LH)

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SEX AND GENDER IN THE SOCIAL SCIENCES: REASSESSING THE INTRODUCTORY COURSE

Principles in Microeconomics

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An exciting part of the project was bringing together nationally recognized scholars, special consultants, field reviewers, and graduate students to grapple with the issue of promoting greater sex and gender equity in both the content and classroom dynamics of introductory college and university courses in microeconomics, psychology, and sociology. Just as combining certain chemicals produces a catalytic reaction, the combining of these people into a project team resulted in intellectual excitement, creativity, and mutual respect as we gathered the necessary information, analyzed and integrated it, and then wrote, discussed, and rewrote this document.

The project co-directors extend great appreciation, admiration, and professional respect to the task force members, special consultants, and field test director, who guided the direction and development of the project; assisted with the format, content, and writing of the modules; and influenced the philosophical base from which it developed. Our confidence in the future was greatly increased by the professional association we had with the four graduate students who served as reseach assistants. They contributed time, energy, and commitment well beyond what had been expected. Appreciation is also extended to Sydney M. Hinckley, Administrative

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INTRODUCTION

The purpose of the Curriculum Analysis Project in the Social Sciences[1] was the development of materials to help faculty teaching introductory courses in microeconomics, psychology, and sociology in colleges and universities incorporate into their course content and teaching practices new and existing knowledge about women and gender-specific knowledge about men. The materials have been organized into two sets of guidelines. The first set relates to curriculum content. The second relates to classroom interaction patterns. The two sets of guidelines have been designed to make the rich and exciting scholarship in this area easily accessible in a form that can be integrated throughout the introductory course. In addition, these materials may also serve as a resource guide for other courses in the three disciplines. Though the guidelines have been designed primarily for use by individual faculty, their use within departments, divisions, or entire colleges could have a profound effect upon the total curriculum.

Two basic assumptions have guided the development of these materials. The first assumption was that most faculty who teach introductory courses in colleges and universities are aware that new research and information on women have affected their disciplines, though perhaps they are not aware of the volume of new materials

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[1]The Curriculum Analysis Project for the Social Sciences was developed at Utah State University during 1979-81 with funds from the Women's Educational Equity Act Program, Department of Education, Washington, D.C.

available as a result of this research. Faculty may want to incorporate the new ideas and knowledge into their courses, but they have little time to review the literature and make the necessary revisions and additions. For this reason the "Content Guidelines: Sex and Gender in the Introductory Course," were created for the disciplines of microeconomics, psychology, and sociology.

The second assumption was that faculty want to use teaching methods and patterns of communication that have a positive effect upon students of both sexes. It is difficult, however, to assess one's differential impact upon students in the classroom. It was felt that tools and strategies for this purpose would be helpful to faculty in any discipline. Consequently, the "Guidelines for Student-Faculty Communication" were created.

Rationale

The development of these guidelines has been based upon three premises:

(1) In the past, women have often been neglected and/or misrepresented in research and in the curriculum;

(2) Much of the current research in the social sciences is now addressing these omissions and distortions;

(3) The scholarship that does address these issues, however, has not become an integral part of the general curriculum in higher education.

Because women have been neglected and/or misrepresented, much of our current knowledge about humankind being taught in the classroom is really knowledge about men. Although many studies have been done using female as well as male subjects, the models of human behavior have been based upon what men do rather than upon what women do.

Women are, therefore, often seen as deviating from a standard of human behavior when they do not behave as men behave. For example, the traditional models of effective group leadership were originally based on the experiences of men in the military and in business. Although many studies of leadership may include female subjects, they typically do not take into account the ways in which gender may affect leadership styles.

The 1970's, however, represent a time of significant social change and were characterized by: the raising of new questions, the revision of traditional models and theories and the formulation of new ones, the improved understanding of some of the basic principles of human interaction, and the opening up of new approaches to the basic disciplines. For example, changes in the nature of the family have had an interdisciplinary impact upon the social sciences. Economists are examining the family from a revised perspective of the decision-making unit, the opportunity costs of those performing household production, and the implications for women of occupational segregation in the labor market. Psychologists are reviewing traditional concepts of the role of mother, father, and family unit in child development theory to include important others such as the extended family, day-care centers, and peer groups. Cultural and class differences have become important areas of inquiry. Sociologists are questioning the basic structure and functions of the family which traditionally rested upon sex roles and generational systems. Increasing awareness of the wide variety possible in family organizations and new theoretical approaches are causing a reexamination of traditional concepts and attitudes about the family in many disciplines.

Unfortunately, though, the scholarship which addresses the neglect or misrepresentation of women has not become an integral part of the general curriculum in higher education. Instead, it appears in women's studies courses, or is carefully packaged and inserted in small segments into the traditional curriculum. This approach to learning perpetuates the myth that women are a special interest group, even though they constitute more than half of the population. Appropriate recognition of women as an integral part of American society requires integration of the new scholarship about sex and gender throughout the general curriculum in higher education.

Although these premises refer only to women, they contain many implications for gender-related issues relevant to men. A more accurate reflection of the current state of knowledge about both women and men within the social sciences curricula would ultimately benefit each. The guidelines themselves reflect a concern for both men and women.

Terminology

We began this project using the term "women and women's issues." We quickly became aware, however, that this language was limited and excluded important findings about men as men. It was ultimately decided that the term "sex and gender" would provide greater accuracy and flexibility. Consequently, it has been used throughout this document.[2]

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[2]See Barrie Thorne, "Gender... How is it Best Conceptualized?" in Laurel Richardson and Verta Taylor, eds., Readings in Sex and Gender, D.C. Heath and Co., Lexington, Mass. (in press); and Rhoda Kesler Unger, "Toward a Redefinition of Sex and Gender," American Psychologist 3:1085-1094, for a more thorough description of the development of terminology.

Currently there is general agreement among sociologists and psychologists that the term, "sex" refers to biological components (hormones and chromosomes) while "gender" is used for the learned and cultural behaviors loosely associated with biological sex. In the sex-gender system, the scholar seeks to understand how the biological nature of humankind (procreation, reproduction, secondary sex characteristics, and visible biological differences between the sexes) is transformed culturally and socially. Social scientists believe that every society effects these transformations, yet in enormously varied ways.

Central to the use of the term "sex" for biology and "gender" for the cultural and learned is the concept of sexuality. Concepts of sexuality have differed greatly for women and men. While ideas about female sexuality have changed over time, women generally have been equated with their sexuality to a much greater extent than men. This has obvious and important consequences for women which are just beginning to be acknowledged and studied. Biological sex, sexuality, and gender are three distinctly different terms in their meaning, but are closely interrelated theoretically and empirically. The phrase "sex and gender" encompasses each of the three terms. Unfortunately, this phrase also includes some of the double meanings and confusions inherent in the three terms, thus keeping alive the interdisciplinary inquiry about the relationships among the terms. Throughout the two sets of guidelines "gender" is often used as a shorthand reference to the sex-gender system, except where distinctions between the terms are particularly significant.

Organization of Materials

There are two major components to the materials presented here. The Content Guidelines assist faculty who want to incorporate new ideas into their curriculum but have little time to review the literature and make the necessary revisions and additions. The Guidelines for Student Faculty Communication assist faculty to assess how subject matter is presented in their introductory courses. A brief description of each component follows.

Content Guidelines: Sex and Gender in the Introductory Course

Separate guidelines have been developed for microeconomics, psychology, and sociology. Each includes an outline of the curriculum areas commonly covered in an introductory course; extended suggestions for content which could be incorporated into the introductory course either as basic knowledge or as examples; a list of key references, including resources for remaining current with new developments; and more extensive references for specific topics.

Guidelines for Student-Faculty Communication

The Guidelines for Student-Faculty Communication are designed to assist faculty to assess how subject matter is presented in their introductory course. They are based upon the realization that teachers' cultural and personal backgrounds affect the way they transmit information and the way they interact with men and women students in their classes. The guidelines consist of two sections: Faculty Communication Patterns and a Student Perception Questionnaire. Faculty Communication Patterns identifies teacher behaviors and language patterns which have the potential for differential affects

on women and men and ethnic minorities. It also includes strategies for change. The Student Perception Questionnaire suggests a way to seek student opinions of classroom interaction patterns according to the students' sex, age, and ethnic group.

CONTENT GUIDELINES: SEX AND GENDER IN THE INTRODUCTORY COURSE

Introduction

Recent college and university courses and/or textbooks have tried to incorporate information about changes in society, institutions, and attitudes relating to women's roles by simply adding a section on sex discrimination, by scattered examples, or by minor adjustments in language and illustrations. However, the amount of scholarly research about sex and gender (to borrow a term from sociology) is so extensive, rich, and pertinent to many topics covered in introductory courses that it can no longer be relegated to a single lecture or avoided. It needs to be diffused throughout the introductory course so that the applications of analytic techniques reflect the current experiences of women and men, as well as references to experiences of racial minorities or other social issues.

The purpose of the guidelines is to suggest recent research findings related to women's economic roles that faculty may wish to use, at least in part, to enrich the presentation of definitions and techniques of analysis. The guidelines are designed to provide easy access to summaries of current knowledge and to key references, and are organized around a topical outline of curriculum areas typically included in the introductory course. These topics are cross-referenced to pages in the following section of the guidelines where a summary of information for a given curriculum area can be found. Pages in this section are divided into three columns. The left-hand column contains the content or topical outline of the course. The middle column contains summaries of

relevant basic knowledge, research findings, and current areas of inquiry about sex and gender. The summaries are by no means exhaustive but rather are suggestive of the amount and variety of information available. No attempt is made to define here the usual terms and concepts of the discipline except as needed to show how the suggested material fits into or is an extension of them. Included with the summaries are citations of additional sources of information. The right-hand column contains examples, discussion topics, and possible assignments that faculty may want to consider for their courses. Changes in language usage are also suggested which complement the content.

Each set of guidelines also contains a bibliography. The introductory section lists important and/or comprehensive references for quickly keeping up-to-date with the rapidly increasing scholarship about sex and gender. The second part of the bibliography lists specific references cited in the guidelines. It also includes other references to more detailed information on specific topics.

Although these guidelines were designed for the introductory course, they may also serve as a general resource guide to materials on sex and gender relevant to topics covered in other economics courses. The curriculum areas allow faculty to select the information that is most applicable to their own interests and needs.

Methodology

The Content Guidelines: Sex and Gender in the Introductory Course were developed for each of the three areas of microeconomics, psychology, and sociology, as described below:

1. A task force was organized to provide expertise in the three disciplines, in research methodology, and in the area of ethnic minorities and the disadvantaged. Nationally recognized scholars from microeconomics, psychology, and sociology who were also acknowledged to be familiar with issues of sex and gender in their disciplines, were identified and invited to be on the task force. They were identified through contact with professional associations and nationally recognized individuals working in education for the improvement of the status of women. The purpose of the task force was originally to be advisory to the project directors. However, they took an active role in influencing the philosophy and direction of the project and in developing the format and content of the Guidelines for Incorporating Information on Sex and Gender into introductory courses.

2. A board of reviewers comprised of nationally recognized scholars in the three disciplines was selected through a similar process to review and critique the guidelines. Four research assistants were hired to work with the project directors and task force members, and special consultants were added to the project staff as needs arose.

3. A survey was conducted of recently published university textbooks commonly used for introductory courses in the three disciplines. The textbooks were chosen to reflect a diversity of authors, publishers, and topics.

4. From the survey of textbooks, a list of the curriculum areas typically taught in introductory courses was prepared for each discipline. The lists were comprehensive so they would apply to most introductory courses.

5. A review of the literature on sex and gender for each of the three disciplines was conducted. Its purpose was to identify information about sex and gender that could be incorporated into a typical introductory course.

6. This information was matched to the appropriate curriculum area derived from the textbook analysis, and a preliminary draft of the guidelines for each discipline was prepared.

7. At the first task force meeting, the scholars from each discipline revised, expanded, and changed the format of the preliminary draft of the guidelines. In their discussions they defined the purpose, proposed audience, and desired tone. It was agreed that the guidelines would be developed for individual faculty to use for self-assessment, and not for faculty evaluation purposes.

8. Following the task force meeting, the guidelines for each discipline were revised. A second draft was mailed to a board of reviewers for comments.

9. Four introductory courses at Utah State University (two in sociology, and one each in psychology and microeconomics) were studied during winter quarter 1980. All materials used in the courses--syllabi, textbooks, supplementary readings, assignments, examinations, media presentations--were collected and analyzed by research assistants using instructions prepared for that purpose.

10. These four courses were also audio recorded daily and the recordings were analyzed for content. The faculty teaching the four courses volunteered the use of their classes. They were assured that the information collected about their courses would remain confidential, and it was agreed that tapes would be available only to the project directors and research assistants. The faculty whose classes were being studied were aware of the general objectives of the project, but were not provided with the instruments or instructions being used to analyze their materials or classroom presentations. The students in the courses were informed that the classes were being used for a research project, but were not told the nature of the project.

Four undergraduate students were hired and trained in the procedures to be followed in audio taping the classes. This included the acquisition, maintenance, and use of the tape recorder and cassettes; the procedures to be followed to keep intrusion into the classroom environment minimal; and the daily transfer of tapes to the research assistants.

Guidelines were developed for use by the research assistants in the content analysis of the tapes. These contained concepts, explanations, and a series of open-ended questions that provided an overview of the dynamics to listen for in the tapes. The listener was asked to extract all comments, phrases, lecture content, and examples that could be incorporated into either the Content Guidelines: Sex and Gender in the Introductory Courses or the Guidelines for Faculty-Student Communication. Periodically one tape was analyzed by the three research assistants independently and results compared as a means of assessing consistency.

11. At the end of winter quarter, the suggestions and comments from the board of reviewers and the data collected during the winter quarter

analysis of each course provided extensive material for another draft of the guidelines for each discipline.

12. The second meeting of the task force focused on discussion of the introduction, format, contents, and bibliography for each discipline's guidelines. The task force members reworked the guidelines and approved them for the field review edition of the document.

13. During the field review phase, Sex and Gender in the Social Sciences: Reassessing the Introductory Course was mailed to six scholars in each discipline. These scholars were teaching introductory courses in a representative sample of higher education institutions chosen for diversity of type, geographical setting, and composition of the student body. At the conclusion of their review, a structured interview was conducted with each of the eighteen participating faculty. Also, during the field testing, the four faculty whose courses were studied during winter quarter 1980 were given a field review edition and asked for their comments and suggestions.

The comments and recommendations of the faculty participating in the field review and the four faculty from Utah State University were incorporated into a final edition of the guidelines for each discipline. This final revision was conducted with assistance and advice from task force scholars.

Review of Literature

Considerable research evidence exists to show that sex inequities occur in the classroom at all educational levels in curriculum content (Grambs 1976, Sadker and Sadker 1979, U.S. DHEW 1978). New scholarship about sex and gender has been generated from scholarly research activities, but there is a need to incorporate this information, together with that previously

existing, into the regular curriculum in order to achieve an appropriate balance reflective of the current knowledge about men and women.

The knowledge generated from research and scholarship about sex and gender in the last decade is reaching students primarily through women's studies courses being taught in colleges and universities. Student interest in these courses is evident in their increasing enrollments in contrast to the general decline in overall enrollment (Howe 1977, pp. 7-8). Evaluations of women's studies courses indicate that student performance is of high quality and the courses often have a major effect upon students' lives (Elovson and Cockcroft 1977).

However, women's studies courses are nearly always electives and enrollment in them is voluntary. Thus, by far the great majority of college students receive little or no exposure to the scholarship about sex and gender during their college years:

> The failure of departments to make systematic offerings of courses on women is paralleled by the lack of substantive matter on women in more general courses in the present curriculum. The history of women in America is only briefly touched upon (if it is mentioned at all) in survey courses in American history. The psychology of sex roles is neglected in introductory psychology courses. The economics of sex discrimination in employment receives insufficient attention in introductory economics. The absence of instruction on psychology, social roles, education, and status of women, their economic, artistic, scientific, and political contributions, and the relationship of these matters to male-female relationships in the past and present reflect a serious failure of the university community (Indiana University, p. 4).

Unless the scholarship about sex and gender is included throughout the core curriculum, this information will continue to reach only the small number of students (in comparison to total enrollment) who select women's studies courses.

There has been change in the curricula at the elementary and secondary levels to include more information about women and to eliminate sexism (DHEW 1977, 1978, 1979; Grambs 1976). As a precursor to the Curriculum Analysis Project in the Social Sciences, a study at Princeton University endeavored to make a preliminary determination of the extent to which material on women is being incorporated into the core curriculum at a number of colleges and universities, and to determine whether a larger effort to assist faculty with course revision would be helpful (Banner 1977).

First, researchers gathered syllabi for introductory courses in history, sociology, psychology, and English. In examination of the syllabi, it was found that 39 percent of the sociology courses and 58 percent of the psychology courses devoted less than a week of attention to women. Fifty-two percent of the sociology courses devoted at least a week to the subject of women, while only 37 percent of the psychology courses did so (Banner 1977, p. 18). In a follow-up examination of sociology textbooks, the researchers found that:

> ....the use of studies pertaining to women is capricious and unsystematic. To the specialist in women's studies it appears that the authors of these texts simply have not done their homework very well. Thus some authors use the Horner study; others discuss the recent work on the sex-role stereotyping of children and adolescents; others offer analyses of women's work force participation or of the feminist movement. Almost none of the textbooks examined include all of these subjects--in each of which there is a growing and impressive body of scholarship. Moreover, there is often confusion over where the study of women properly belongs. Stemming from the functionalist domination of the field of sociology several decades ago, with its view that the proper place of women is in the home, many textbooks discuss women as a subgroup within the standard chapter on the family and give a sexist cast to this material (Banner 1977, p. 10).

To verify the information obtained from the syllabi and to better understand the reasons underlying the apparent failure to incorporate the burgeoning scholarship on sex and gender, the researchers extended their

study to survey department chairs, women academics, heads of women's studies programs, and editors. These surveys focused on the integration of scholarship about sex and gender into introductory courses.

The survey of department chairs resulted in a different viewpoint than the results of the analysis of syllabi would have indicated. Ninety percent of those surveyed thought faculty in their departments ought to make a special effort to include material about women in their courses. However, only 38 percent believed that over half of their colleages actually did so. The department chairs gave equal weight to the influence of the new research and publication within their discipline and to the presence of women faculty within their departments as reasons for believing that more materials were being included in the regular curricula (Banner 1977, p. 24). The survey of women faculty indicated that they were not as optimistic as their department heads. While stating that faculty ought to include material on sex and gender in their courses, and that they themselves had made extensive efforts to do so, they were unsure that their male colleagues were making such an effort. Perhaps the most persuasive reason why was succinctly stated by one woman faculty member:

> The reason that I can effectively integrate material on women is that I teach a course on the subject and thus I can easily find sources, anticipate questions, and build lectures that will include women's experience. Given the newness of women's history, few of my colleagues have ever studied women or have much incentive to do so now (Banner 1977, p. 43).

Surveys of male faculty who were teaching introductory courses and looking for ways to revise their courses to include material on women indicated agreement with this viewpoint. Moreover, they were not prepared to spend many days or even hours doing so. The extensive bibliographies prepared by the caucuses of the professional associations were not helpful, as these guides were too exhaustive and uneven in quality (Banner 1977, p. 2).

The Princeton researchers reached several conclusions. First, the decision to incorporate scholarship about sex and gender is a highly individual one. Second, curricular revision now takes place in a haphazard manner because the decision is an individual one and strategies and methodologies have not been developed and widely disseminated to help the willing faculty member. Third, to bring about widespread curriculum reform is difficult. The revision of a course outline and the incorporation of new material takes time and energy which in a busy academic schedule of teaching, research, advising, and administration is not easy to find, especially when a course currently being taught is successful. However, unrevised courses have the greatest likelihood of containing stereotypic and out-of-date material on sex and gender which may leave students with a distorted and inaccurate view of the current state of knowledge.

For the future of women's studies and for the achievement of a nonsexist curriculum in higher education, the Princeton Project researchers recommended strongly that the trend toward inclusion of material about sex and gender throughout the college curriculum be encouraged and facilitated. Specifically, they recommended guidelines that would aid the hesitant or overburdened faculty member with the incorporation of the materials, and a listing of resources for becoming familiar with the field and for staying up-to-date (Banner 1977, pp. 46-46). These recommendations have guided the CAPSS project's materials in the disciplines of microeconomics, psychology and sociology.

Citations

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CONTENT ON SEX AND GENDER:

PRINCIPLES OF MICROECONOMICS

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Curriculum Areas	Content	Examples and Discussion Topics
I. SCARCITY AND CHOICE	Economics deals with choices of how to use scarce resources with alternative uses to produce and distribute goods and services for consumption. Production primarily occurs in firms and consumption in households (families and individuals).	Neither production nor consumption is wholly a male or female activity. Men's and women's roles as producers and consumers are shaped by the society in which they live (Bell, C.S 1974).
A. Production possibilities curve and growth	Underemployment of resources is inefficient; therefore, underemployment of women is inefficient. Because of occupational segregation by sex, many women are underemployed, considering their educational levels and abilities. Maximum production occurs when all inputs are free to move to their most highly valued use.	More than 80 percent of the female work force is concentrated in occupations that are predominantly female--occupations that for the most part are low-paying and provide little opportunity for advancement. The female labor force has years of education equal to the male labor force (U.S. Department of Labor 1977a, pp. 7, 8, and 31).
	The production possibilities curve is drawn under the assumption that society operates within a set of institutional constraints such as protection for private property, freedom of labor to change jobs, and absence of slavery.	Discussion topic: Should customs leading to the underutilization of women in paid market work be considered as part of the given institution and thus a market constraint, or should they be considered as market imperfections leading to inefficient points within the production possibilities curve?

Curriculum Areas	Content	Examples and Discussion Topics
	Increased numbers of women participating in the job market have caused the production possibilities curve to shift out.	Between 1965 and 1976 the number of women working or looking for work increased by more than 12.2 million, while the number of men in the labor force increased by 8.1 million (U.S. Department of Labor 1977a, p. 5). (Also see dat in section VII below.)
	The value of household production currently is not part of national accounts. If it were, GNP would be much larger. Various estimates of the magnitude of household production related to GNP range from 28 to 36 percent (Hawrylyshyn 1976).	The opportunity cost to household members doing their own housework is the highest wage they could otherwise have earned during those hours.
	Other estimates have placed the value of household production as equal to 1/5 to 1/3 of the total gross national product. The implications of not counting non-market work in national accounts are serious in that what is not counted is not seen. This can lead to economic development planning based on unrealistic estimates of production possibilities and growth rates.	For ways of valuing household production and rationales, see Brody (1975). Discussion topic: Should another measure be added to our national accounts to cover current GNP and nonmarket activities?

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	Volunteer labor is also invisible when we look only at the market economy.	
3. Opportunity cost	For many women the opportunity costs of working exclusively within the home have risen, and so they have entered the paid labor market.	The opportunity cost to society of having women in limited roles is the progress that might otherwise have been made by them in their chosen fields.
	Increases in real wages accessible to women throughout this century have stimulated greater attachment of married women to the labor force, i.e., continuous work patterns.	For a discussion of opportunity costs to women of raising a family, see Espenshade (1980).
	Much work done by women is outside the labor market and not assigned an explicit value by the market. The household sector has been estimated to be the fourth largest sector in our economy. To value this work, these implicit costs must be evaluated.	Household work is an implicit cost to the household. In decision-making, members must decide how much home production of goods and services is worth to them.
. EXCHANGE, AND OTHER BASIC CONCEPTS	All individuals will engage in trade in order to reach a preferred position.	

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A. Comparative advantage	Married women may have a comparative advantage in housework to the extent that their opportunity costs in terms of foregone wages may be less than that of their spouses. But this comparative advantage is weakening as women acquire more human capital and achieve higher wages.	For fun, try the following example: The lawyer who practices law better than <u>her</u> secretary, and types better than <u>her</u> secretary, may have a comparative advantage in practicing law and leaving the typing to <u>him</u>.
	Changing attitudes of men and women toward shared parenting, shared production of income, and shared financial responsibility for the family are leading to changing attitudes towards shared nonmarket household production plus transfer of some items previously produced at home to the market economy.	Attitude change is slow, and married women in the labor force report 26 hours of housework a week in addition to their paid employment (Hofferth and Moore 1979, p. 113). This means a major loss of leisure time for women working outside the home at this time. Husbands spend an average of 11 hours a week doing housework, whether or not their wives work outside the home (Glazer-Malbin 1976).
B. The law of diminishing returns		When <u>businesspersons</u> or <u>entrepreneurs</u> increase one of their variable inputs, holding the amount of <u>their</u> fixed inputs constant ....
C. Choice between labor and leisure	For a woman who is a member of a family, the choice is not between work and leisure, but between paid work outside the home and unpaid work at home (Bell, C. 1974, p. 621).	Actually both women and men face four options: paid employment, unpaid work at home, outside volunteer work, and unproductive leisure.

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Curriculum Areas	Content	Examples and Discussion Topics
I. COMPARATIVE SYSTEMS: TRADITIONAL, MARKET, COMMAND, AND MIXED ECONOMIES	In order to evaluate the relative merits of these systems, contrast the roles of women historically and currently, as well as the roles of men. Consider the stated goals of these systems versus the actual outcomes. (See Ferber and Lowry, 1977 for cross-national comparisons of labor force participation, occupational distribution, and earnings.)	In the Soviet Union women work outside the home but are still responsible for all work inside the home. Workers may have united, but women workers are not yet equal to men workers. Women are more highly represented in technical positions in the U.S.S.R. than they are in the U.S., yet there are some occupations in the U.S.S.R. which are almost exclusively male. There is evidence that occupational segregation has increased in recent years in the Soviet Union. For example, in 1959, 16 million women were employed in jobs which were 70 percent female. In 1970, 30 million women were in the female-intensive occupations (Lapidus 1976, p. 127).
A. Growth of the market system	Development of a market system from its feudal system roots required changing many basic concepts and attitudes. Some are suggested below.	

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Curriculum Areas	Content	Examples and Discussion Topics
1. Land, labor, and capital	Land, labor, and capital had to be conceptualized and treated as factors of production that themselves could be bought and sold in markets instead of allocated by feudal customs. This meant enclosure of public lands in England and movement of workers from small land holdings into the early factories.	For descriptions of the historical role of women in the market econom see Boulding (1976). For industri alization and family wage economy in early modern England and France see Tilly and Scott (1978).
	The Industrial Revolution resulted in wide spread social change as resources were reallocated and attitudes towards work changed. The current shift of women into the labor market from unpaid work at home may result in social change of comparable magnitude (Newland 1979, p. 140).	The impact of industrialization an economic development on the status of women in developing countries h often been negative (Boserup 1970
2. Individual choice	In discussing the role of women in the labor market, choice and opportunity are equally important (Arnold and Packer 1978).	The extent to which men and women are free to choose their own livelihoods.
3. Property rights	Until recent times, men had property rights and women and children were considered as the property of men.	

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Curriculum Areas	Content	Examples and Discussion Topics
	According to Boulding (1976), laws were written in terms of rights for males exclusively from approximately 1751 B.C. until modern times. Other scholars, (see Hartman 1976) attribute the concept of viewing women as property to the emerging capitalism of the middle ages.	Discuss whether or not this is a social class issue.
1. Advantages and disadvantages of market system	Among the advantages are the impersonal way the market answers the major questions that any type of system must answer (i.e., What is to be produced, how, and for whom?), and efficiency if the market can be characterized as perfectly competitive. In the purely competitive factor market, it is sometimes thought that there is little room for discrimination to affect wages, certainly in the long run. Some economists assume that in reality any divergence from atomistic competitive markets is not significant, and efficient solutions can be expected. But male-female wage differentials have persisted, and wages in the real world cannot be assumed to be solely the result of competitive markets.	In competitive service markets, racial or sexual prejudice on the part of customers can lead to discriminatory sales or discriminatory employment.

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Curriculum Areas	Content	Examples and Discussion Topics
V. DEMAND		
A. Utility analysis	New models consider a husband and wife's joint utility functions in determination of demands for work and leisure (see Ashenfelter and Heckman 1974, Wales and Woodland 1976 and 1977).	Both spouses were employed in 1976 in nearly half of the husband-wife families (U.S. Department of Labor 1977, p. 37).
B. Individual and market demand curves	The consumer unit is assumed to be the economic family with decisions somehow made within the unit. Economic theory does not usually look within the consumer unit to see how consumption (or labor supply) decisions are made. Major changes in the composition of the unit, such as shifts to smaller families, or more single person units, will shift the demand curve for goods such as housing. Marketing studies often have assumed the unit consists of employed husband, full-time homemaker, and children under eighteen at home, yet this family type represents less than 16 percent of the economic decision-making units today. See Watts and Skidmore (1979) for proposed new concept of unit that allows for shifts in membership over time.	

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rriculum Areas	Content	Examples and Discussion Topics
Elasticities		When using grocery store prices increases to describe various ranges of price elasticity along a straight line demand curve, take care to have male shoppers aware of their changing demand patterns as well. If he notices that the price of cereal has gone up by 40¢, what is the relative magnitude of his response? Is his demand elastic?
Shifts of demand	Consider women's demands for insurance, automobiles, liquor, cigarettes, vacations, and lawn-mowers, as well as men's. The movement of items such as meal preparation, cleaning services, and to some extent, child care from household production to the market sector, and the need for work-related expenditures, has shifted the demand curves for such items to the right as women have moved into paid employment.	For example: Shifts of demand to more highly processed food products reflect both the full-time home-maker's and the housewife/wage earner's desire for convenience food. This shifts much of the time and work involved in meal production to the food processing plant which is a basic reason for the underlying spread between producers' costs and retail prices. However, "labor saving devices" in fact have not significantly reduced the total amount of time full-time homemakers spend doing housework; cleanliness standards and amount of time spent chauffering children have gone up, for example (Glazer-Malbin 1976).

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Curriculum Areas	Content	Examples and Discussion Topics
E. Price takers' and price seekers' demand curves		
F. Advertising	Advertising is intended to shift the product demand curve to the right. To the extent that the advertising is offensive to segments of the public, the demand curve may shift to the left. In recent years there have been formal and informal boycotts of firms which use sexist advertising.	Many men and women are offended by sexual pitches for nonsexual products, and by the facts that most "authorities" in commercials are men, and that women are usuall shown in less prestigious occupations than men. Concern has also been expressed about the portrayal of violence against women in ads.
SUPPLY	Supply of goods or supply of labor depends on costs and varies with prices. Implicit costs are not assigned a value by the market, but are true economic costs which must be considered and evaluated using their opportunity costs. Supply of labor depends on the opportunity costs of time and other costs of working. It varies with wages offered. For some women, the opportunity costs of their time is the value of home-produced goods and services that they could not produce if they used their time for market work.	

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Curriculum Areas	Content	Examples and Discussion Topics
VI. MARKET STRUCTURE		
A. Monopoly B. Pure competition C. Oligopoly D. Monopolistic competition		Most economic terms such as the monopolist, or the pure competitors, are neutral in gender. Repetition of these terms avoids the temptation to use the pronoun, "he" unadvisedly, and also serves to reinforce the economic concepts It is easy to lapse into the use of "he" in examples out of habit.
VII. FACTOR MARKETS		
A. Land	In some societies only men can inherit land. In societies where inheritance of land is through mothers to daughters, men (i.e., brothers) generally control the land.	
B. Capital	In the United States more than half of private wealth is owned by women, but control is another matter. Most large corporations are capital-intensive. Few women are found among managers of large businesses.	Example: Use statistics on the number of women presidents of companies in the Fortune 500.

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Curriculum Areas	Content	Examples and Discussion Topics
C. Entrepreneurship	More women are opening their own businesses. Some have been very successful. There has also been encouragement of entrepreneurship among minority women. (New York Times National Recruitment Survey 1980, pp. 56.)	Cite current examples.
D. Labor		
1. Labor force participation	Growth of women's participation in the labor force has been rapid, especially among married women with children. The age groups of married women with the greatest proportion of women employed in 1976 are the 20-24 year old group (65 percent) and the 35-44 year old group (58 percent). Contrary to the past, the 25-34 year old group now is not far behind (57 percent). The 45-54 year old group also has 55 percent in the labor force (U.S. Department of Labor 1977a, p. 5). This obviates the previous expectations of employers that women will leave the labor force when they marry and won't work long enough to be worth the employers' investing in on-the-job training for them. The majority of working ... (Cont.)	Between 1950 and 1976 the number of married women in the labor force with husband present nearly tripled. Nearly half of all children under age 18 in 1976 had mothers in the labor force. The labor force participation rates for women in 1976 were 59 percent for never married, 45 percent for married, husband absent, divorced, or widowed. If those older than 65 were removed, the percentages would be higher (U.S. Department of Labor 1977a, pp. 15 and 19).

ırriculum Areas	Content	Examples and Discussion Topics
	women now are married with husband present and are closely tied to the labor force.	
	The labor force participation rates of young women 20-24 years old have increased steadily since 1955, and for each age group up to retirement age the participation rates have increased steadily from 1955 to 1980 (U.S. Department of Labor 1977a, p. 6).	From 1968 to 1977, the labor force attachment of employed women has increased substantially, and the average female worker has gained work experience. This is because the probability of exit has declined dramatically for both full-time and part-time female workers. Thus, the growth in the female labor force has been primarily a drop in the exit rate (Barrett 1979a, quoting Leon and Bednarzik 1978). Dual-career couples do face different costs and benefits than single earner families. The following list might help elicit additional items from students in class: Benefits Greater income Career flexibility (not dependent on one income so freer to change jobs or take occupational risks) Shared responsibility for financial support of the family Greater use of both partners' abilities and skills in paid employment

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Curriculum Areas	Content	Examples and Discussion Topics
		Costs Higher taxes Limitations on geographic mobility (conflicts of interest may arise Cost of childcare (if applicable)
	Among all ages, quits to exit from labor force are larger for women but quits to move are larger for men. Younger and older workers of both sexes have higher quit rates than the middle aged (Barnes and Jones 1974).	Women stay single longer now. Quit rates for men and women are very similar for the same job.
	Women's labor force participation is influenced by many of the same factors which influence men's labor force participation and many others factors not affecting men in the same way.	
2. Demand for female workers, structure of wages	Occupational segregation by sex characterized the American labor market.	
	Women are segregated and crowded into certain occupations, leading to lower wages in these female occupations. Bergmann (1974) built upon Edgeworth's earlier work to show crowding effect on wages.	More than 80 percent of the female work force is employed in clerical, nursing, teaching (non-college or university), finance, insurance, real estate, and service jobs, each of which is more than ... (Cont.)

rriculum Areas	Content	Examples and Discussion Topics
		50 percent female. Clerical occupations alone employ 40 percent of the female work force (U.S. Department of Labor 1977a, pp. 8,9). These occupations are, for the most part, low paying and provide little opportunity for advancement. In 1977, less than 20 percent of men working full-time, year-round, earned less than $10,000, compared with more than half the full-time, year-round, women workers (Barrett 1979b, p. 32).
	Within industries and firms, women are segregated by occupational categories.	
	Many unions have made efforts to exclude women. This has contributed to occupational segregation by sex.	The concept of the family wage for the male worker was developed by the early unions to drive women out of the factories, limit labor supply, and increase men's wages. (For other tactics see Hartman 1976.)
	Barriers to entry and then to advancement exist for women at professional levels. Comparisons of percentages of women earning Ph.D.'s (1930-1978) indicate a <u>decrease</u> until the 1970's.	Large percentages of women economists for example, report social or professional isolation and lack of support from colleagues (Reagan 1975).

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urriculum Areas	Content	Examples and Discussion Topics
3. Human capital	The rate of return on women's investment in human capital may be less than the return on a similar investment by a man.	Women working full-time, year-round in 1976 on average earned only 57-61 percent of the wage of comparably educated men (U.S. Department of Labor 1977a, p. 36). In part, this is because there are disproportionate numbers of women at starting levels, and because of occupational segregation by sex, and unequal pay for work of equal value.
4. Discrimination	Discrimination by employers is a major reason for both lower wages of women and continued barriers to advancement of women. Discrimination hurts wages of women and racial minorities, increases wages of Anglo men, and lowers total economic product. For economic theories of discrimination, see the employers' taste for discrimination model (Becker 1971) which is even less applicable to women than to minority races (Madden 1973), the monopsony model (Madden 1973), and the crowding theory (Bergmann 1974). For alternative explanations of the wage gap, see the "family socialization hypothesis" (Gwartney and Straup 1980, p. 300-364) and "greater discontinuity" concept (Mincer and Ofek 1980).	In 1976, the median income of women with four or more years of college and who worked full-time, year-round, $10,519, was close to the median income for male high school dropouts, $10,040, and below the male high school graduate, $12,260 (U.S. Department of Labor 1977a, p. 36). An ethnic comparison of 1975 median earnings of all women working full-time, year-round shows that white women earned $7,504; Black women earned $7,237, and women of Spanish origin earned $6,431. The median for all men was $12,631 (U.S. Department of Labor 1977a, pp. 36, 51).

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	It is a myth that women are not breadwinners; that they don't really need the money. Some women, of course, are working less out of economic desperation and more from a desire to contribute to the economic production of society and the economic well-being of their families.	Wives working full-time with husbands present contributed 60 percent of the family income for families with income less than $10,000 in 1975, and 45 percent for families with income from $10,000 to $15,000 (U.S. Department of Labor 1977a, p. 38). According to Census Bureau, households headed by women rose 51 percent during the 1970's to 8.5 million (Wall Street Journal, December 31, 1980, p. 1).
II. INCOME DISTRIBUTION AND ECONOMIC GOALS		
A. Income distribution	Minority families are more likely than white families to be in poverty, but the greatest financial detriment for a family is to be headed by a woman. By far the greatest single determinant of a family's position in the income distribution is whether or not it is headed by a woman.	A comparison of 1975 median income of husband-wife families with children under 18 shows that white families had $16,080, Black families had $11,873, and Spanish origin families had $11,356. In families headed by women, median income was $5,967 for white families, $4,569 for Black families and $4,730 for Spanish origin families (U.S. Department of Labor 1977a, p. 47).

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Curriculum Areas	Content	Examples and Discussion Topics
	A large percentage of those families in poverty are led by female heads of households (i.e., female householders). Poverty has become a woman's issue. Most women work because they need the money. "There is no question that poverty in America today and the vast, costly, and unnecessary welfare system that it has spawned, is inextricably bound up with the inability of women to compete with men in the labor market on an equal footing." Poverty incidence is high among elderly women. This problem will increase in importance in the future as the aged become a larger proportion of the population (Barrett 1979a, pp. 9, 12).	The increase in the number of families living in poverty since 1969 has been among families headed by women. One in every three female-headed families has an income below the poverty line (U.S. Department of Commerce 1976a, pp. 53, 54). "Over 14 percent of all women over 65 lived in poverty in 1976, and women comprised over 70 percent of poor elderly persons" (Barrett 1979a, pp. 8, 9). Note that it makes a big difference whether one looks at the income distribution of individuals or of families.
. Equity and efficiency	In our society it has been generally accepted in principle that equity involves equal opportunity for all.	In actuality, barriers to equal opportunity exist for many groups.

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1. Equity and equal opportunity	Media emphasis on a few upwardly mobile women executives or women entering male-dominated fields gives the false impression that women recently have made considerable progress. In fact, institutional barriers to equal opportunity for women remain.	One barrier is the common practice of using different job titles or classifications for similar work done by men and women in the same firm. Barriers are often subtle, giving invisibility to women, inequitable on-the-job training, denial of access to informal networks that can play a major role in career building, or unwillingness of male superiors to accept a mentor role toward women that would be deemed completely appropriate for up-coming men. Griggs vs. Duke Power (March 1971) is a landmark case involving discrimination. In Griggs vs. Duke Power, the U.S. Supreme Court "articulated the doctrine of adverse impact. It stated that Title VII looks to the 'consequences' not the intent of an employer's action. If any action taken by an employer has an adverse impact on the employment opportunities of any group protected by the law, the burden rests on the employer to prove that his discriminatory behavior is a business necessity--i.e., necessary to the safe and efficient operation of the business" (Wallace 1977).

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2. Full employment	The female unemployment rate is usually higher than the male. (See data from 1950-1976, U.S. Department of Labor 1979.) This is, in part, because women entering the labor force were having trouble finding jobs.	The differential between the male and female unemployment rates increased from the 1963-1964 recession through 1969 (Gottschalk, 1980; Ferber and Lowry, 1976). During the 1974-1975 recession, the industries and occupations where few women are employed (such as construction and durable goods industries) were hit the hardest, and retail trade and services where most women are employed were hit the least.
	Minority women have higher unemployment rates than white women.	In March 1976, the unemployment rate for white women was 7.9, for Black women 13.1, and Spanish origin 12.5 (U.S. Department of Labor 1977a, p. 45).
	Full-time women workers do not experience the same career paths as full-time men workers.	The pattern of male earnings over the life cycle is to rise sharply in mid 20's and 30's so that males in the 25-45 age bracket are earning twice the median income of the 18-24 year group. Women, on the other hand, gain very little over the life cycle (U.S. Department of Commerce 1976a, p. 47).

Curriculum Areas	Content	Examples and Discussion Topics
3. Efficiency	Removal of barriers to full utilization of women and minorities at all levels, free movement of such workers among occupations, and restructuring of markets to eliminate occupational segregation by sex would greatly improve efficiency (as well as equity).	Many jobs traditionally considered appropriate for women have little or no on-the-job training opportunities and no career ladders (e.g., health service workers, elementary school teachers, secretaries). This structuring of jobs was based on the now out-moded idea that women would be in and out of the labor force so much that on-the-job training would not pay employers.
	Flex-time patterns now being developed offer opportunities for more efficient use of both female and male workers. Job sharing is another possibility.	
IX. THE ROLE OF GOVERNMENT		
A. Anti-trust legislation		
B. Regulation of multi-firm industries		

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Curriculum Areas	Content	Examples and Discussion Topics
C. Anti-discrimination legislation	Legal changes can set the framework for equality, but translation into action takes much more and sustained effort. Note that if these changes toward equality and obviating sexism are not understood, misallocation of resources and major inefficiencies result and the goal of equity is violated.	Employers are forbidden to refuse to hire persons because of their race, color, sex, national origin, and religion, except that sex can be considered if it is a "bona fide occupational qualification essential to the necessary and normal operation of that particula business or enterprise" (i.e., actors and actresses). Employers are also prohibited from discrimin tion in compensation, promotion, lay-off, recall, working condition training programs, seniority systems, and terminaton.
	The Equal Pay Act of 1963 amends the Fair Labor Standards Act of 1938 to provide equal pay for equal work under the following conditions: (1) equal work means equal skill, effort, responsibility and similar working conditions; (2)it only applies within a firm; (3) exceptions include seniority, merit, systematic differences in quality and quantity of production, and other factors such as time of shift.	(See Wallace 1977, for discussion of the impact of this legislation.

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rriculum Areas	Content	Examples and Discussion Topics
	Title VII of the Civil Rights Act prohibits discrimination in any aspect of employment because of an individual's race, color, religion, sex or national origin including hiring, firing, wages, working conditions and any terms of employment. It is not applicable if less than 15 workers are employed in a firm. Executive Order 11246 (affirmative action) prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin by federal contractors including those working on federally-assisted construction projects. Title IX of the Education Amendments of 1972 prohibits sex discrimination in educational programs, including vocational and professional programs.	
	Unequal treatment of women is still a feature of the American legal system (tax structure, Social Security, inheritance laws, failure to ratify the Equal Rights Amendment). This discourages ...(Cont.)	The federal tax system penalizes the married woman who works in the market by charging the two-earner family more tax than if they were allowed to file separately. This is the so-called "tax on ... (Cont.

rriculum Areas	Content	Examples and Discussion Topics
	labor market participation and accumulation of human capital by women. The Social Security system was designed to protect the traditional single-earner, husband-wife family with children. Now, two-earner families receive smaller benefits in relation to the Social Security taxes they pay than do one-earner couples. Also, retirement benefits to a divorced homemaker who does not remarry are low, especially while the former husband is alive.	marriage." Also it may be argued that the single person pays disproportionately high income taxes compared with the one-earner couple because the imputed income availabl to the couple from the full-time homemaker is not considered (Gordon 1979). Women who work often have little increase in retirement benefits or even have lower benefits from working and paying taxes than they are due as dependent spouses. Thus the two-earner family is likely to have paid more Social Security taxe and the survivor actually receive lower benefits than if one spouse had remained home, out of the labor force (Gordon 1979). Public policy alternatives can be discussed in terms of their neutrality with respect to marital preferences and whether married women choose to work full-time in unpaid work at home (full-time homemakers) or enter the labor force and work outside as well as inside the home.

CURRICULUM ANALYSIS PROJECT FOR SOCIAL SCIENCES
Content on Sex and Gender: Principles of Microeconomics

urriculum Areas	Content	Examples and Discussion Topics
The provision of public goods.	A good of increasing concern having some aspects of a public good is the provision of reliable day-care (Strober 1975, Lewis 1973).	
Correction for negative externalities and environmental preservation	Note that there are positive externalities involved in increased labor force participation by women as, for example, relaxation of the stereotype of male responsibility for family support, and benefits to the children of shared child rearing.	The argument for day-care as a public good is parallel to that for education. That is, that everyone benefits from living in an educated society. Even if you do not have children in school, you have an interest in seeing other people's children educated and can be asked to help pay for their education. Likewise, it might be argued that child care benefits the society at large in terms of sharing the responsibility of rearing the young and providing more effective and diversified use of the potential labor market.

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The references listed here have been selected for their usefulness in lecture preparation and/or for classroom use to update the introductory course in microeconomics following the surge of economic literature related to women in the economy. All have been published since 1970. Many of the sources in this bibliography lend themselves to reading by undergraduate students because they are not as technical as much of economic literature and they do not presuppose familiarity with other economic literature.

Some of the best of the articles of general interest have been specially prepared and brought together in collections such as Cahn's (1979) papers on working women in a full employment economy, Blaxall and Reagan's (1976) articles on occupational segregation by sex, and Smith's (1979) papers about women's labor force participation. Special situations of minority women are the focus of the following: Barrett and Morgenstern 1971, D. Bell 1974, Flanagan 1974, Wallace and LaMond 1977, and Wallace 1978. For a summary of wage theory with particular emphasis on occupational segregation by sex, see Blau and Jusenius 1976.

On-going current data can be obtained from updated publications parallel to those cited here under AFDC, U.S. Departments of Commerce and Labor, and U.S. Civil Service Commission. Data available and the usefulness of federal statistics relating to women are analyzed in the papers edited by Reagan 1979.

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GUIDELINES FOR STUDENT-FACULTY COMMUNICATION

Introduction

The Guidelines for Student-Faculty Communication are based on the premise that, first, college professors are competent, conscientious and professional individuals who neither desire nor intend to be biased, prejudiced, or offensive in their interactions with students; and secondly, that instructor bias, nevertheless, does occur in the classroom, not as a function of intent, but as a result of lack of awareness or as a product of misinformation. Thus the primary focus of these guidelines is to create a greater awareness of the subtle and sometimes not-so-subtle ways in which sex bias and gender stereotyping occur through classroom interactions and potentially result in limited aspirations and restricted choices for both men and women.

Our expectation, at this point, is that many university professors may declare, with either surprise or chagrin, that they do not stereotype, are not sexist, and certainly do not limit the aspirations and development of their students. However, subtle forms of sex bias and gender stereotyping have been so universal in American schools and so seemingly accepted within our culture that, until the last decade, they have remained almost invisible--or when visible, have been viewed as innocuous.

Stereotyping, of course, affects the behavior of students as well as faculty. Our aim, however, is to inform faculty about possible biasing patterns of interaction with the hope that they will take the responsibility for bringing about change.

The Guidelines for Student Faculty Communication consists of two sections. The first, Student-Faculty Communication Patterns, identifies and discusses types of interactions that occur in the classroom which reflect or promote sexual or ethnic bias. Suggestions and examples are given as to how these adverse and inhibiting interactions may be corrected or alleviated. The second section, The Student Perception Questionnaire is designed to provide faculty with students' perceptions of the interactions occurring in the classroom.

STUDENT-FACULTY COMMUNICATION PATTERNS

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Student-faculty Communication Patterns

The goals of the Student-Faculty Communication Patterns are to create a greater awareness of the ways in which faculty may inadvertently promote gender stereotyping and reflect sex or ethnic bias by identifying specific behaviors and language patterns that may be demeaning to particular individuals or groups, and to provide strategies for change. The information in the Student-Faculty Communication Patterns has been organized into the following seven subsections: (1) Review of the Literature, (2) Development of the Student-Faculty Communication Patterns, (3) Student-Faculty Communication Checklist, (4) Perpetuating Stereotypes, (5) Language Usage, (6) Classroom Interaction, and (7) Instructional Materials. Each of the last four subsections is divided into a topic area in which problems are identified and briefly discussed, and strategies for change are suggested. These strategies include methods, examples, and illustrations for eliminating stereotyping or bias. The material was developed from a review of literature and from the content analysis of four introductory university courses in the social sciences.

Review of Literature

The interaction of communication patterns with sex and gender in the academic setting is complex and not yet adequately researched since each interaction pattern involves a variety of variables. Although most of the research on the dynamics of classroom interaction has been done at the elementary and secondary levels, there is some evidence that college and university faculty may also interact with and treat male students

differently than females. This can occur, for example, through verbal and written language patterns, body language, differential reinforcement of student comments, and the personalizing of interaction as in the use of a student's name or eye contact.

Elementary and Secondary Level. It is well established that differences do exist in the classroom behaviors of boys and girls at the elementary and secondary school levels, and that differences exist in the way teachers relate to boys and girls in the classroom (Levitin and Chanais 1972; Jackson and Lahaderne 1967; Sears and Feldman 1966; Dweck et al. 1978; Child et al. 1966).

Sadker and Sadker (1979a) extensively researched the literature on teacher expectations and interactions in the classroom and subsequently developed a curricular unit for teacher education programs entitled, "Between Teacher and Student: Overcoming Sex Bias in the Classroom." They state that teachers enter a classroom with culturally developed expectations of boys and girls and that those expectations result in differential interaction patterns. Students are encouraged to perform to the expectations of the teachers, thereby promoting and reinforcing gender stereotyping. Thus, we find that girls are expected to do poorly in math but to shine in poetry and other subjects requiring verbal skills; conversely, boys are expected to do well in math and the biological sciences, but not in language skills. This limits the potential of students and is costly to both boys and girls academically, psychologically, economically, and in career choices.

Research cited by the Sadkers indicated that boys receive more reprimands and disapproval from teachers, but also receive more praise

and more positive and active teaching attention than girls (Sadker and Sadker 1979a, pp. 26-27, 42). Teachers describe girls with adjectives such as cooperative, mannerly, poised, sensitive, while they use adjectives such as active, adventurous, curious, and independent to describe boys (Sadker and Sadker 1979a, p. 16). Criticisms of girls focus on lack of knowledge and skill, whereas boys tend to be criticized for disruptive behaviors in the classroom. Although boys are seen as potentially disruptive, they are also seen as more creative and rewarding to teach (Thorne 1979, p. 13). The Sadkers make the following observation:

> We find that boys, especially high achieving boys, receive more approval, questions, detailed instructions, and, in general, more active teaching attention. We see that girls of all ability levels do not interact as frequently with teachers. Nor do students who are members of minority groups (Sadker and Sadker 1979a, p. 28).

Teachers are more likely to engage in extended task-related conversations with boys (Sadker and Sadker 1979a, p. 27). Teachers are more apt to give male students detailed instructions to enable them to do things for themselves, whereas they tend to do things for girls rather than explain to them how to do them (Sadker and Sadker 1979a, p. 27). The research suggests differences in teacher contacts with students both qualitatively and quantitatively. A study at the secondary school level "found striking differences in favor of boys. Boys were asked more direct questions and more open questions; they received more teacher initiated work contacts and more total positive teacher-student contacts." (Sadker and Sadker 1979a, p. 26).

College and University Level. There is also evidence of differences in the way college and university faculty relate to and interact with men and

women students. In the fall of 1979, scholars from many disciplines were invited to a special conference on the Education Environment for Undergraduate Women at Wellesley College, Wellesley, Massachusetts. A major concern was sex difference in the interaction patterns between faculty and students and their effects. Two researchers reported their findings regarding variations in teaching styles and student responses using a timed observation technique (Macke et al. 1979; Sternglanz 1979). Results of the Sternglanz (1979, p. 7) study indicated a consistent pattern of sex differences among students despite the fact that there was no discernable encouragement of this pattern by their professors. Faculty in the observed classes reinforced almost every attempt to initiate an interaction with men and women students. The sex of the faculty member and the type of subject matter in the observed class did not affect these results, with one important exception. There were significantly more interactions in classes taught by women than in classes taught by men. Men students had more and longer interactions with their professors than did women. In class after class where the observations were taken (60 classes in all) women students initiated interaction less often and ended interactions sooner than men (Sternglanz 1979, p. 8). Numbers of multiple interactions and numbers of interactions by multiple interactors all contributed to the consistent difference in amount of participation between women and men students (Sternglanz 1979, p. 11).

Also at the Wellesley conference, Thorne drew on research on gender and patterns of interaction done in a variety of settings which pointed to the positive aspects of women's speech. She stated,

> These diverse studies (and I know of none with strongly counter findings) do suggest that in interacting with one another, women have developed ways of cooperating, of providing mutual support, of granting one another more equal verbal space, and that these patterns are less present in all-male or in mixed-sex groups.

> We need studies of college classrooms with different sex ratios; we may have a great deal to learn from interaction in all-female classes, although the dominance of the teacher may establish a general hierarchial mode. But if one is intent on breaking down dominance and competition in educational contexts, as many feminists are, we may find that women's speech can teach us a great deal (Thorne 1979, p. 20).

Yet to be investigated is the linkage, if any, between the information being presented, how that information is presented, and classroom interaction patterns. Studies reported at the Wellesley College conference continuously stressed the need for more research on the classroom environment and its effect from a variety of perspectives. These ranged from studies of language used by faculty to nonverbal interaction. The underlying concern at the conference was that faculty behavioral patterns can encourage or discourage differences in student responses and learning on the basis of sex and other variables. The need for increasing awareness among faculty was a dominant theme.

Development of the Student-Faculty Communication Patterns

The Student-Faculty Communication Patterns section represents an integration of information from the review of the literature and from the analysis of four introductory university courses. The specific procedures followed were:

1. As textbooks for introductory courses in microeconomics, psychology, and sociology were reviewed for development of the Content Guidelines, information was also identified for use in the Student-Faculty Communication Patterns section. Textbooks and journal articles promoting sex equity in education were reviewed. Of particular value were the guidelines on sexism and language published by professional groups and publishing firms.

These included: The American Psychological Association (1977), The American Sociological Association (1980), Houghton Mifflin (1975), Macmillan (1975), McGraw Hill (1974), and the Council on Inter-racial Books for Children, Inc. (1977).

2. During winter quarter 1980 one microeconomics, one psychology, and two sociology courses were audio recorded daily and recordings were analyzed for content. The faculty teaching the four courses volunteered the use of their classes. They were assured that the information collected about their courses would remain confidential, and it was agreed that tapes would be available only to the project directors and research assistants.

The faculty whose classes were being studied were aware of the general objectives of the project, but were not provided with the instruments or instructions being used to analyze their materials or classroom presentations. The students in the courses were informed that the classes were being used for a research project, but were not told the nature of the project.

3. Three undergraduate students were hired and trained in the procedures to be followed in audio taping the classes. This included the acquisition, maintenance, and the use of the tape recorder and cassettes, the procedures to be followed to keep intrusion into the classroom environment minimal, and the daily transfer of tapes to the research assistants.

4. Guidelines were developed for use by the research assistants in the content analysis of the tapes, which provided a conceptual framework from which the tapes could be analyzed. (By this time the research assistants had reviewed an extensive amount of literature relating to sex

and gender and were well prepared for such an analysis.) The Guidelines for Tape Analysis contained concepts, explanations, and a series of open-ended questions that provided an overview of the dynamics to listen for in the tapes. The listener was asked to extract all comments, phrases, lecture content, and examples that could be incorporated into either the Content Guidelines or the Guidelines for Faculty-Student Communication. Periodically one tape was analyzed by all three research assistants independently and results compared as a means of assessing consistency.

5. While tape recording each class session, the undergraduate students also completed a classroom observation form. They were asked to record, by sex, the number of times students asked a question, responded to a question asked by an instructor, and made a comment in class. They also recorded the number of times an instructor called them by name, asked them a question, or positively reinforced a student response. This provided additional information about classroom interaction that has been incorporated into the Student-Faculty Communication Patterns.

6. This section was revised on the basis of comments from the field test reviewers. Eighteen faculty from six universities and colleges in the San Francisco Bay area who teach introductory courses in psychology, sociology and economics were asked to evaluate this material and make any suggestions for changes. Each faculty member was interviewed and was asked to submit a written report.

Student-Faculty Communication Checklist

It may be difficult for an instructor to be consciously aware of the interactional dynamics in the classroom, while at the same time transmitting the content of the lecture or guiding a discussion. For this

reason, the following techniques are suggested to help faculty with an analysis of the interaction in their classes.

A. Classroom Observation

Having a friend, colleague, or teaching assistant observe some of your classes on a random basis can be helpful. Classroom observation can be used to answer questions such as:

1. What is the number of males versus females called on to answer questions?

2. Which students (male or female) participate in class more frequently through answering questions or making comments? Is the number disproportional enough that you should encourage some students to participate more frequently?

3. Do interruptions occur when an individual is talking? If so, who does the interrupting?

4. Is your verbal response to students positive? aversive? encouraging? Is it the same for all students? If not, what is the reason? (Valid reasons occur from time to time for reacting or responding to a particular student in a highly specific manner.)

5. Do you tend to face or address one section of the classroom more than others? Do you establish eye contact with certain students more than others? What are the gestures, postures, facial expressions, used and are they different for men, women, or minority students?

B. Audio Taping of Class Section

A student could tape record some of your class sessions. Self-analysis of the tapes could provide answers to questions such as:

1. Which students do you call by name?

2. What language patterns are you using? Is there a regular use of male referencing? or the generic "he"? or the universal "man"? Are stereotypical assumptions about men and women revealed in your classroom dialogue?

3. Are examples and anecdotes drawn from men's lives only?

4. Can differential patterns of reinforcement be detected from the tapes?

Perpetuating Stereotypes

Primary to the whole area of sexism in classroom interaction patterns is the concept of gender stereotyping. Stereotyping is the assignment of characteristics or traits that may be common to a group to every individual within that group without consideration for individual differences. It may occur in relation to variables such as age, sex, ethnic membership, or even activity.

When teachers and students at any educational level enter a classroom, they take with them their own values, attitudes, and socially influenced beliefs about men and women and what are appropriate behaviors for each. Horner states,

> From the books we read, the stories we hear and the "models" we observe, we develop an awareness of expected categorical distinctions within our society. Gradually, by a process of continual reinforcement, we adopt existing cultural norms in such a way that they become capable of exerting subtle psychological pressures on us. The exercise of these norms as internalized criteria against which we then judge the aspirations, feelings, and behavior of ourselves and others tends to perpetuate the existing categorical distinction (Macmillan 1975, p. v.).

Horner suggests that education is the key to ending stereotyping. Yet Sargent (1977, p. iv.) says that "much of the blame for the prevailing sex biases can be attributed to education and the part it plays in the socialization process."

In the HEW publication, Taking the Sexism Out of Education (1978), the statement is made that "teacher's behavior is probably the most critical factor in determining whether what happens in the classroom will encourage the development of flexibility or the retention of old stereotyping practices" (p. 16). Consequently, for a faculty member to continuously portray women or men in only traditional roles or to allow students to do

so, reinforces the stereotyping and has an insidious effect in terms of the restrictions imposed on both.

Stereotyping can be perpetuated in a wide variety of ways. Stereotypes are frequently communicated as myths or characterizations and may be misleading. Sensitivity to topics which may generate stereotypic examples, phrases, and/or ideas may help one to avoid this problem.

TOPIC AREA	STRATEGIES FOR CHANGE
I. General problem of stereotyping Stereotyping encompasses a wide range of issues including age, race, sex, and handicaps. Stereotypes are frequently communicated as myths or characterizations.	Vague generalizations which evoke stereotypical images can be avoided. Myths and beliefs can be challenged by presenting varied examples of women and men.
e.g.: husband as breadwinner, or the assumption that a woman cannot have the same kind of career as a man and still have a family.	e.g.: the myth that math anxiety among women indicates a lack of innate math ability is fairly prevalent in our society. Fear of math among women may be the result of social expectation and lack of preparation.
II. Stereotyping of roles Portrayal of males and females in traditional roles can reinforce stereotypes. Family roles are most often stereotyped.	Present examples of varied lifestyles and family structures such as dual-career families, childless couples, female-headed households, singles, and other alternative living arrangements.

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: assumptions that all women will be or are wives and mothers, henpecked husbands, interfering mothers-in-law, only women are capable of mothering.	e.g.: Talk about men as homemakers and women as breadwinners; sharing of parenting responsibilities.

III. Stereotyping characteristics of an occupation

Avoid presentations surrounding the occupational structure which immediately classify men or women into specific working roles.

e.g.: Avoid using teacher or nurse as she and doctor or truckdriver as he.

As much as possible avoid using a female or male referent when talking about an occupation. Refer to the lawyer or secretary without saying she or he.

Various examples can be experimented with which will challenge traditional ideas of work.

Be careful not to present women and men in stereotypic fashion in work roles.

e.g.: "mothering nurse," "just a secretary," "career women" but not "career men."

e.g.: Talk about a female bank president, a male nurse, a female veterinarian.

TOPIC AREA	STRATEGIES FOR CHANGE
IV. Stereotyping of personality characteristics Generalizations about masculinity and femininity are often vague and may reinforce misleading stereotypes. Avoid causal attribution of personality traits on the basis of sex, or portraying women and men as traditional extremes. e.g.: men as stoic and distant, women as over-emotional and dependent, men as sexually aggressive, women as passive, women who cry to manipulate men, women as being at fault or the reason behind negative aspects of marriage.	There is no need to dichotomize human behavior into masculine and feminine roles. Traits which have been characterized as masculine and feminine occur in both women and men. Generally, one's socialization process and social context will determine to what degree a person is passive or aggressive; stoic or emotional. Point out that it is much more common to find men and women who possess many of the same traits, emotions, etc., than to find women and men who are traditional extremes. Discussion topic: Why are these stereotypes still prominent in popular culture?

TOPIC AREA	STRATEGIES FOR CHANGE
V. Stereotyping of physical characteristics Many stereotypical assumptions about male and female abilities are unsupported by evidence. Consider the meanings and value attached to certain abilities as opposed to others. e.g.: Strength is defined as the ability to lift heavy objects rather than as endurance; e.g.: males are seen as mechanical, or good with numbers, while females are artistic, or good at writing. Even when the same abilities are involved men may have the prestige positions. e.g.: women have been considered the cook at home, but men are usually the chefs in fine restaurants.	Point out the fact that women and men possess many of the same abilities. Physiological differences between men and women do not necessarily translate into differences in abilities or performance.

TOPIC AREA	STRATEGIES FOR CHANGE
VI. Stereotyping minority women or men, or disabled individuals	
Be sensitive to situations which may inadvertently present the disabled or minorities in a stereotypic light.	Stress positive aspects of the disabled and minorities. In addition, caution students not to assume that on the basis of encounters with a few minority or disabled individuals, all minorities or handicapped women and men are the same.
e.g.: Native Americans as drunks; epileptics as unemployable.	
e.g.: white women have been seen as fragile or weak, while black women are considered physically strong and sturdy.	Use positive examples of men and women who are disabled or minorities and who have made achievements in various fields:
	e.g.: Helen Keller, Franklin Roosevelt, Patricia Harris, Reverend Jessie Jackson, Barbara Jordan, Martin Luther King
When stereotypes concerning race, ethnicity or disability are added to gender, the problem is naturally compounded. These combinations often present contradictions.	Consider the impact that compounded stereotypes have on a person's sense of self and their everyday interactions

Language Usage

Language has been identified as being intrinsically linked to sexism and to gender stereotyping. Various authors have written about the influence that male dominance in society has had on the use and structure of the English language. A review of the growing literature relating to language and gender is not feasible in this document. However, there is evidence of a widely-based view that language reform can help decrease sexism. Thorne and Henley, Language and Sex: Difference and Dominance, 1975, is an excellent source of information about language usage.

Because language is so closely linked with the way we think and the attitudes we communicate, it is a logical target for instructors attempting to ensure nonbiased teaching. Perhaps the crucial factor affecting non-biased instruction is an awareness of the nature and degree to which an instructor's own language is inadvertently biased. Such an awareness can be gained by listening to one's own language patterns (tape recordings of classroom presentations are especially helpful); by listening to others; by familiarizing oneself with the issues of language bias; and by learning and practicing new language patterns such as those recommended in the following section (See Miller and Swift, 1974 and 1980).

TOPIC AREA	STRATEGIES FOR CHANGE
I. Universal language Terms and titles which use "man" to represent all of humanity have the effect of excluding women as participants in human activity. Research indicates that when people hear or read "he" and "man" in a generic context they rarely visualize females. Generic terms are not integrated in a neutral way (Martyna, 1978). The generic use of masculine terminology also implies that the male is the norm in society.	Generic language can generally be avoided once it is identified.
e.g.: "man," "mankind," and "the family of man," "the rise of man," "great men in history," and "economic man."	e.g.: substitute "people" for "man," "world's peoples" for "mankind," change from "the rise of man" to "the rise of civilization" or "the rise of humanity," change from "great men in history," to "great figures in history," "economic man," to "economic actor."

TOPIC AREA	STRATEGIES FOR CHANGE
	A variety of other words can also be used to denote both sexes.
	e.g.: human, human beings, individuals, persons, society.
Similarly, terms that denote a universal meaning, but which are in fact, specific, should also be avoided.	Another approach is to emphasize verb- "actions" rather than noun- "subjects."
e.g.: using the term "mothering instinct" to describe parenting behavior or "gentlemen's agreement" as a mutual understanding between two people.	e.g.: "truck driving is..." rather than "the truck driver, he...," nursing involves putting the patient's well being first," rather than "a nurse must always put her patient first."
II. Gender-specific titles or terms The use of gender-specific titles or terms when referring to either neutral objects or to groups composed of women and men is not only inaccurate, but is stereotypic, and should therefore be avoided.	

TOPIC AREA	STRATEGIES FOR CHANGE
A. Gender-specific titles and terms are often used when referring to occupations or positions that are not, in fact, gender-specific. The list of such terms is almost endless.	Neutral terms should be used when a term or title does not refer specifically to a person of a particular sex. Neutral terms exist for almost all occupations and positions and should be substituted.
e.g.: "chairman," "housewife," "salesman," "fireman," and "steward/stewardess," "businessman," "coed," "working man," "repairman," and "forefathers."	e.g.: "chairman" becomes "chair" or "chairperson," "housewife"-"homemaker," "salesman"-"salesperson," "fireman"-"firefighters," and "steward/stewardess"-"flight attendant," "coed"-"student," "working men"-"workers," and "forefathers"-"ancestors" or "forebearers."
B. Personification of inanimate objects should be avoided. For example, female referencing to ships, cars and hurricanes is inappropriate unless the object is specifically gender-referenced as The Queen Mary.	Sex-specific referencing to inanimate objects should simply be omitted, or referred to as "it."

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: "Have you seen my new sports car? She's really beautiful." or "There's a new hurricane brewing and she's supposed to hit Florida tonight."	e.g.: "Have you seen my new sports car? It's really beautiful." or "There's a new hurricane brewing and it's supposed to hit Florida tonight."
C. Addressing a class, or any group, in sex specific terms, discounts members of the class or group who are of the opposite sex.	Always use terminology that includes all members of the group being addressed.
e.g.: To address a class as "you guys" or to say "suppose your wife..." discounts women in the class.	e.g.: "What do you students think about..." or "suppose your spouse..."
D. Animals should be referred to as "it" unless the sex is specified.	Either make the animal's sex specific or refer to it in neutral terms.
	e.g.: "The horse ate his hay." should either be "The stallion ate his hay." or "The horse ate its hay."

TOPIC AREA	STRATEGIES FOR CHANGE
E. Do not use labels such as male/female or masculine/feminine to denote general characteristics.	Specify exactly what is being referred to.
e.g.: "The first grade girls chose typically feminine gifts." "He has very feminine interests."	e.g.: "The first grade girls chose dolls, clothes, and games as gifts." "He likes to cook and sew."
III. Gender referencing Gender referencing permeates our everyday language and the classroom is no exception. Instructors, students, textbooks, and media materials often employ extensive, and generally inappropriate, gender referencing, although there has been considerable change in the last five years.	A great deal of gender referencing is a function of habit, and as we all know, habits are hard to break. There are several methods of avoiding bias due to gender referencing, however, several of these are listed below.
	1) An easily employed technique to avoid gender referencing is to use plural nouns.

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: "The farmer uses his fertilizer to...," "The nurse gets her uniform..."	e.g.: Simply substitute farmers/their as in "Farmers use their fertilizer to ..." "Nurses get their uniforms..."
	2) One of the most overlooked methods of avoiding gender referencing is to simply delete the sex referent. Such a deletion may call for some slight sentence restructuring to maintain grammatical correctness.
e.g.: "The accountant uses her ledger to...," "The worker explained to his boss that...," "The nurse did not know what she needed for..."	e.g.: "The farmer uses fertilizer to...," "The accountant uses a ledger to...," "The worker explained to the boss that...," "The nurse did not know what was needed for..."
	3) Often alternate, neutral describers can be used in place of he or she. For instance, if discussing a psychologist, the terms therapist, or psychotherapist, may be alternately substituted for psychologist thus avoiding the need to use sex referents.

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: "The psychologist conducting the seminar said that... He further stated that..."	e.g.: "The psychologist conducting the seminar said that...," "The therapist further stated that..."

Generally there is more than one word that can be used to describe the same person.

e.g.: Worker, employee, laborer, can all be used to refer to the same individual.

4) Often a large portion of class time may revolve around an issue involving two parties. For instance, several class periods may be used to discuss the therapist/client relationship in psychology, the dynamics of labor/management interaction in economics, or the conflict between street gangs and enforcement agencies in sociology. For example, in discussing the therapist/client relationship, it would be extremely difficult

TOPIC AREA	STRATEGIES FOR CHANGE
	to avoid referring to either the therapist or the client as he or she, even if the other techniques discussed in this report were employed. A method of instruction which is easily employed completely eliminates this problem. Instead of using third person referents, first person (I/my) and second person (you/your) referents are substituted. The instructor, in effect, is cast in the role of one party being discussed and the class in the role of the second party to the issue. An endless number of issues can be discussed using this method while completely avoiding the habitual use of sex specific referents. Discussions of this sort are not awkward or stilted, but seem to flow naturally and easily.

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: "Suppose the therapist has an angry client. In order for him to understand her anger, he might ask her..."	e.g.: "Suppose you (the class) are an angry client and I (the instructor) am your therapist. In order to understand your anger, I might ask you..."

Another variation employs the use of first and third person plural forms in much the same way as the singular format.

e.g.: An instructor might cast we/us in the role of labor and they/them in the role of management as in, "If we felt ou rights were being ignored, we could first petition them with a list of our grievances. If they ignored that, we could..."

Although this method seems to work especiall well with two parties, other variations also seem effective. For example, if only one party is the topic of discussion, the class might be used to represent that party.

TOPIC AREA	STRATEGIES FOR CHANGE
e.g.: "If an individual were in a situation necessitating applying for public assistance, how would he feel about..."	e.g.: "If you (the class) were in a situation necessitating applying for public assistance, how would you feel about..."
	5) Combined and/or alternating referents can be used.
e.g.: "If a sociologist wants to know more about this, he may consult..."	e.g.: "If a sociologist wants to know more about this, he or she may consult..." or at one time refer to lawyer "he," then next example, doctor "she."
	6) Finally, the instructor should carefully review texts and media to find sources that minimize gender referencing and/or that use such referencing in a numerically and qualitatively balanced way.

TOPIC AREA	STRATEGIES FOR CHANGE
IV. Non-parallel terminology The use of non-parallel terms when referring to women and men in the same category gives the appearance of being biased or prejudiced.	Within the same context of reference, parallel terms when referring to women and men should be used.
e.g.: Referring to the class as "men and ladies" or "men and girls" would be using non-parallel terms.	e.g.: Parallel terms are: men/women, boys/girls, guys/gals, and female/male.
Another example of non-parallel language is reference to a woman's appearance and family without similar reference to a man's appearance and family. Butler (1978) gives the following examples.	
e.g.: The candidates were Bryan K. Wilson, President of American Electronics, Inc. and Florence Greenwood, a pert blonde grandmother of five.	e.g.: The candidates were Byran K. Wilson, President of American Electronics Inc. and Florence Greenwood, credit manager for Bloominghill's Department Store. Or, The candidates were Bryan K. Wilson, a handsome silver-haired father of three and Florence Greenwood, a pert, blonde, grandmother of five.

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TOPIC AREA	STRATEGIES FOR CHANGE

V. Women as a Special Category

Another pattern of linguistic bias is placement of women in a special category.

> e.g.: A man who is an economist will not be referred to as a "man economist" or a "male economist," but his female counterpart will often be distinguished by her sex as "the woman economist," or a "female economist." This implies that economists are presumed to be male.

At times male exploits are glorified while women's may be trivialized.

> e.g.: "John Tyler is a world champion skier, and Karen Jones has won some of the world championships for women."

> e.g.: "John Tyler and Karen Jones are world champion skiers."

TOPIC AREA	STRATEGIES FOR CHANGE
VI. Slang Terms The use of slang terms such as broad, chick, fox, dude, stud, etc., which are derogatory to women and men is always inappropriate. Similarly, care should be taken to avoid slang terms referenced to minorities and handicapped persons.	Use of slang terms can be discussed for their underlying meaning.
VII. Attitudinal Change Faculty members are becoming increasingly more aware of the desirability to change their speech patterns. Analysis of classroom presentations that were part of this study showed faculty members in a transitional stage between traditional forms of speech and non-sexist speech. Such change is bound to feel awkward from time to time and require practice. However, Bate (1978) demonstrated that speakers can change their habits of biased language usage through conscious effort, given the information and the support necessary for change.	

TOPIC AREA	STRATEGIES FOR CHANGE
People generally feel awkward and unsure of themselves when learning a foreign language. Words do not feel right at first and it is a constant effort to use words and speech patterns that are foreign. The initial discomfort associated with a new language is, however, overcome with continued practice. One example is the transition that has been made from use of the term "colored" to "Negro" to the currently preferable term "Black," or "People of Color." Many faculty felt uneasy with the initial use of the term "Black" but with repeated use, it has become comfortable.	The use of non-biased language is similar to learning a foreign language. It requires constant awareness and practice before it can become second nature. The instructor is encouraged to try out some of the "new language" presented in this report and to practice the use of non-biased language until it becomes comfortable and spontaneous. Many people discover that they not only speak in the new language but think it as well. Occasionally, it is helpful to check one's language patterns by audio or video tape recording some class sessions and reviewing the tapes (see checklist). The process of new language acquisition can be facilitated by sensitively listening to other's speech patterns as well.

Classroom Interaction Patterns

Interaction with students within and outside of the classroom should be qualitatively similar for men and women. However, there is evidence that gender may affect classroom interaction. Interactional differences that occur in the university classroom, or outside of the classroom but in an educational context, may contribute to sexual inequities. Research findings are complicated. Interaction may vary by subject matter, size of the class, ratio of men and women, or sex of the instructor, making it impossible to generalize findings to every classroom.

The observations in this section are drawn from the research literature and from the classroom analysis that was part of this project. They are included not as conclusive evidence but to provoke a reflection and examination of the interactional dynamics which may occur in your classrooms.

TOPIC AREA	STRATEGIES FOR CHANGE
I. Classroom participation greater among males Students are responsible for some of the differential interaction that occurs. Research indicates that, more often than not, males participate in classroom discussion significantly more frequently than females. This includes asking questions, responding to questions, and making other comments to the instructor or class. Classroom analysis and observations that were part of this project showed a far higher participation among males, relative to their representation in the classes. Data collected from administration of the Student Perception Questionnaire in four introductory Social Science courses at Utah State University indicate that the vast majority of women never participated in class, whereas there was limited participation by men in three large lecture courses. The lack of	Women can be encouraged to verbally participate in class discussion. You might make sure that you are calling on women as well as men to answer questions when they raise their hands and consciously make eye contact with women at times to encourage questions and responses. Expectations for participation should be the same for men and women. It may help to verbalize these expectations to the class.

TOPIC AREA	STRATEGIES FOR CHANGE
classroom participation by females was their choice. They did not want to participate. The stated reasons were primarily feelings of inadequacy. The underlying reason is conjecturally related to their perceptions of the female role as a passive role, and to the cultural belief that men should be more verbally dominant. One of the project co-directors noticed the disproportional participation by males in one of her classes, drew this to the attention of the class, and asked why? The most common element in the responses was surprise. After class, women students indicated they had learned years before that women were to be seen and not heard.	
II. Disproportionate interruption of speech Men interrupt women's speech more frequently than women interrupt the speech of men. Zimmerman and West (in Thorne and Henley, 1975) found that men exert conversational control, not only through sheer quantity of speech, but also through interruptions.	Faculty could try to develop an awareness of interruptions of speech that occur before, during or immediately following a class, including who they interrupt and patterns of interruption among students. Are women interrupted disproportionately? Do certain subjects

TOPIC AREA	STRATEGIES FOR CHANGE
	trigger more discussion or interruptions? Faculty can insist that participants be allowed to complete their thoughts without interruptions.
III. Addressing students by name Faculty may know the names of more men than women students. Being addressed by name has a positive effect on self-image. It can also give those students who are known an advantage with regard to job referrals, recommendation to graduate schools, incentive to seek out the faculty member after class, etc.	How many students in your introductory courses do you know by name? If they are large lecture courses, the number may be small. But do you know the names of men and women students in approximately equal proportion to their numbers, or is there a disproportionate representation of one sex or the other? This is easy to check--simply write down names of all the students you know in a particular class. If there is a disproportional representation, make an effort to learn the names of those unequally represented on your list.

TOPIC AREA	STRATEGIES FOR CHANGE
IV. Credibility of speech Women students, as well as women faculty, may have more difficulty than men in establishing credibility in the classroom and in discussion groups. This is related to established linguistic differences between men and women, with male speech patterns being the more highly valued. Studies indicate that the actual differences between the speech of women and men are not as great, as perceived differences are (Jenkins and Kramer 1978).	Do you react to the speech patterns of men and women in qualitatively similar manner? The tendency exists for men, at least in small group discussions, to disqualify what women say. Is there an indication that this may be occurring in your classroom? This may be done by attributing what a woman says to a man without realizing it. You can trace the raising, development, and dropping of topics in seminars and classrooms to see if there are patterns related to gender by tape recording your classes or through classroom observation.
V. Positive reinforcement Responses to the Student Perception Questionnaire indicated that a small percentage of students (both men and women) perceived men receiving more encouragement for responding in class than women, although there was variation by instructor.	Classroom observations, as part of this project, showed that the vast majority of student responses were positively reinforced by faculty. However, since some students felt as though instructors were more interested in and encouraged responses of men more than women, there may have been subtle forms of communication

TOPIC AREA	STRATEGIES FOR CHANGE
	operating that the observers did not detect. Instructors are encouraged to be conscious of verbal and nonverbal patterns of reinforcing student participation, and whether the reinforcement is qualitatively similar for women and men. With indicators that women are insecure or ambivalent about participating, they may need additional encouragement and reinforcement to overcome their early acculturation and the possible negative consequences of success for women.
VI. Nonverbal communication Nonverbal behaviors should also be examined for possible incongruity in regard to men and women. This includes eye contact, gestures, postures, and location in room while lecturing. Thorne (1979, p. 15) relates the story of a woman faculty member whose students drew to her attention that when she asked a question in class, she tended more often to make eye contact--which invited	Nonverbal communication can occur through a number of body movements and gestures such as a smile or a frown; turning away when a student is speaking versus leaning, or stepping forward as if with interest; establishing and maintaining eye contact versus avoidance of eye contact or looking down at lecture notes. Study of nonverbal behaviors could be made by an invited observer or by using video-tape.

TOPIC AREA	STRATEGIES FOR CHANGE
response--with men rather than with women students. Eye contact however, involves two parties. It may be that more female students avoid eye contact.	
VII. Seating pattern There is evidence to show that classroom participation is related to seating patterns. More discussion occurs among students sitting at the front and down the middle of a classroom.	Is there a pattern of seating in your classroom by sex and/or minorities? If certain groups routinely sit at the side or near the back of a classroom, is it by choice or because no other seats are available? If by choice, what is the reason? Perhaps efforts should be made to draw those students into discussion.
VIII. Interaction before and after class Who do you generally talk to? Which students approach you? If more men than women, can you think of ways to equalize the response.	There is evidence at the graduate level that female students have difficulty establishing the same rapport with male faculty that male students enjoy. This pattern may be reflected as well in undergraduate education. Check the number of recommendations you write for female and male students.

TOPIC AREA	STRATEGIES FOR CHANGE

IX. Uses of humor

Although humor in the classroom is seldom intended to hurt or demean others, it may convey stereotypical attitudes and bias. This area is one which requires particular sensitivity on the part of the instructor, as students may reinforce even blatantly inappropriate humor. Thus, student laughter or positive response does not ensure that one's statements are inoffensive to all class members. Below are outlined a variety of ways to identify and eliminate inappropriate humor.

A. Humorous or teasing reference to the physical or sexual characteristics or attributes of students in the class is inappropriate. Comments which are intended to be complimentary may be demeaning.

> e.g.: "Sorry, I didn't hear the question--I was watching all these cute girls coming in."

TOPIC AREA	STRATEGIES FOR CHANGE
When women or men are portrayed only in regard to their physical attributes, stereotypes are reinforced. Therefore, reference to the physical characteristics of others, such as current sex symbols, is also generally inappropriate.	
B. The treatment of serious topics in a humorous way, thus downplaying their significance is often used when an instructor or students are uncomfortable or tense about a topic, and so they attempt to lighten the atmosphere. Such use may be offensive to some students and/or convey biased attitudes.	Serious topics should be discussed as such, without the use of humor which downplays their importance. Inappropriate laughter by students during such discussion can be confronted. The instructor may use such laughter as a springboard for a discussion of why a particular topic is difficult to talk about in our society, and/or to point out the tension-reducing function of laughter and humor.
e.g.: The use of untimely humor when discussing serious and sensitive issues such as rape, mental illness, alcohol or drug abuse, sexual deviance, the Equal Rights Amendment.	e.g.: "I noticed that some of you laughed when I brought up the topic of sexual harassment. I wonder why such laughter occurs?"

TOPIC AREA	STRATEGIES FOR CHANGE
	or e.g.: "I'm noticing a lot of you laughing, even though this topic is very serious. It is a little uncomfortable talking about things we don't usually discuss, isn't it?"
C. The use of students' comments, questions, or answers as the basis for jokes by the instructor should be avoided. Such use of humor is demeaning to students in the class, and may discourage further participation. Students' put-downs or derogatory remarks should be called to the attention of the class and discontinued.	Students' contributions to class should be treated with courtesy and respect, even when inaccurate or unsophisticated.
D. Humor can be used, in constructive ways to point out stereotypical and contradictory beliefs.	Good examples of humor which deals with gender stereotyping may be found in such anthologies as Free to Be You and Me (Marlo Thomas et al. 1974) and Pulling Our Own

TOPIC AREA	STRATEGIES FOR CHANGE
Consider to what audience the humor is directed. Who is the object of the joke? e.g.: the stereotype of gay men or gay men themselves.	Strings: Feminist Humor and Satire (Kaufman and Blakely 1980). Role reversal is often a good way to point out the foolishness or limited perspective of stereotypes we hold about others. Commercial provide good examples: Imagine Mr. Folger coming into your kitchen. Imagine Bridegroom magazine. Humor which is used to enhance the ability to take the perspectives of others may be a real aid in the classroom.

Instructional Materials

Although instructors are primarily concerned with general content when choosing texts and media materials, attention can, and should, also be paid to issues of sex and gender. Despite much improvement, sex bias is still evident in most instructional materials today. Efforts should be made, first to choose the least biased materials and, secondly, to counter-balance through supplemental materials and class instruction and discussion, any biases that unavoidably remain. An instructor's sensitivity and insight are the best tools for evaluating textbooks and supplementary readings. Specific attention should be paid to the topics included in this report entitled, Language, Perpetuating Stereotypes, and Classroom Interaction. The issues and strategies discussed previously can be applied to the review and selection of instructional materials. Outlined below are additional topics that can be considered when reviewing and choosing such materials.

TOPIC AREA	STRATEGIES FOR CHANGE
I. Contributions and omissions Historically, the content of most introductory level material in the social sciences has been oriented to the contributions of men. Although some disciplines have been sensitive to this issue, all have, nevertheless, neglected women and women's issues to some degree. A still too common experience, for instance, is to find an introductory text that does not mention any women in its overview of the history of the discipline. The major contributions of women in every field of the social sciences should be included.	When reviewing instructional materials, attention should be paid to the appropriate inclusion of women and women's issues relative to the content of the course. This is covered in detail in the content instruments. e.g.: Does the instructional material contain research about and by women, examples drawn from women's lives, contributions to the discipline made by women, and issues of concern to women of all ethnic and racial backgrounds.

TOPIC AREA	STRATEGIES FOR CHANGE

II. Numeric and qualitative balance

The term "appropriate inclusion" implies that women and women's issues be included in a numerically and qualitatively balanced fashion. This does not mean that for every man mentioned, a women must also be mentioned.

Appropriate numeric balance may mean, therefore, the inclusion of only one or two women when describing the history of a given discipline or it may involve only research conducted by women when discussing a particular topic if, in fact, women have made the only significant contribution of information to that topic. Qualitative balance is similarly the inclusion of women and women's issues that avoids stereotyping. Women's issues should reflect the realistic and contemporary view and understanding that we now have of the importance and significance of women in our social, economic, and political system, both currently and historically.

Numeric and qualitative balance can be considered when reviewing instructional materials relative to content, research, examples, illustrations, and language. Acceptable texts and media materials ought to include:

1) the contributions of women that are significant to the field

> e.g.: women theorists, research conducted by women, historical examples from women's lives.

2) issues of particular significance to women

> e.g.: discrimination in the job market, credit allocation, and inheritance, violence against women, abortion, birth control and rape.

3) humor and language that is not sex-biased.

4) proportional inclusion of women in illustrations, examples and pictures.

TOPIC AREA	STRATEGIES FOR CHANGE
III. Mainstreaming It is inappropriate to isolate sex and gender issues in instructional materials in an isolated separate section of a chapter or in a separate chapter.	Because sex and gender permeates the mainstream of every social science, related topics should be mainstreamed throughout texts and media materials.
e.g.: an economics textbook that only makes mention of women in the labor market at the end of a chapter in a brief discussion under a separate heading such as "Other Aspects of the Labor Market."	e.g.: Women in the labor market should be discussed throughout an introductory economics text including, for instance, such topics as labor discrimination, labor trends, efficiency of allocation of labor....
IV. Research Research cited in class discussion may contain inherent biases or weakness.	Many times students accept research results without question. Encourage students to review research studies critically, and question the methods, samples, results, analyses, and interpretations of research studies. Identifying problems and pointing out shortcomings will help students avoid making false inferences.
e.g.: citation of a study demonstrating a positive association between position in the job hierarchy and work satisfaction and failure to mention that the study sampled men only.	

TOPIC AREA	STRATEGIES FOR CHANGE
Inferences made from research should be well supported by the evidence. If there are limitations, these should be discussed. Conclusions which are improperly drawn may have an adverse effect on minorities and women.	In order to avoid the possibility of improperly drawn conclusions, discuss research results thoroughly. Point out ways in which the results could be misinterpreted, thereby counteracting such misinterpretation.
e.g.: rape victims held partially responsible for the assault; inferences that Blacks score lower on I.Q. tests because they are less intelligent.	
Recognize areas of research in which much controversy exists. Be careful not to bias a presentation of research results by simply mentioning one side of a controversy. Both sides of controversial research issues can be pointed out and discussed.	
Care also needs to be taken to avoid the inappropriate generalization of results.	e.g.: Female rats portray a maternal instinct under laboratory conditions. However, one cannot conclude from this that females of all species have maternal instincts or that only females have maternal instincts.

TOPIC AREA	STRATEGIES FOR CHANGE
Do not omit important facts or findings which could lead students to misinterpret results. e.g.: The Moynihan Report of 1965 interpreted female-headed households and high rates of illegitimacy as symptoms of family disintegration. The assumption made in this report was that there is something wrong with women heading households and that this contributed to the failure of Blacks. Black women, thus, were responsible for the inferior status of the race. The report failed to consider the variety of domestic strategies found in urban Black communities.	Mention various sources of additional research information such as journals, recent texts, etc., which deal with the topic under discussion. Encourage students to search for these research findings.
Do not omit the contributions women and minorities have made in research areas.	In order to stay current in the area of research contributions women and minorities have made to the field, a number of techniques can be used:

TOPIC AREA	STRATEGIES FOR CHANGE
	1) Knowledgeable people at your college of university can be contacted. They can provide information on research, and refer you to sources of information. 2) Journals which are dedicated to women's studies and ethnic studies. 3) Indexes, such as Women's Studies Abstracts. 4) Refer to the Content Guidelines: Sex and Gender in the Introductory Course. It contains information and research on and by women which relates to introductory sociology, psychology, and microeconomics courses. It also includes references and a bibliography which may be of considerable help.

Student Perception Questionnaire

The interaction of communication patterns with sex and gender in the academic setting is complex and not yet adequately researched. There is some evidence, however, to indicate that males participate in classroom discussion to a greater extent than females in both the number of interactions and length of interactions, that men interrupt women more often than women interrupt men, that women's speech tends to be devalued, and that men are expected to be more articulate and credible than women (Thorne 1979). Evidence also exists to indicate that women choose not to participate in classroom discussions because they feel insecure.

In view of this information, it was felt that it would be helpful for faculty members to have some means of learning about the interaction patterns occurring in their own classrooms. One possible approach was to develop a procedure for gathering an objective, quantifiable record of selected classroom interactions. This approach, however, posed two problems. One was that many classroom interactions are subtle and difficult to record accurately. For example, they may consist of no more than eye contact with a certain individual or group of individuals. This led to the second problem. To use this type of measurement instrument in a classroom setting would necessitate the training of individuals to act as observers and recorders. It would also be necessary to attain appropriate measures of interrater reliability. Even if these were not insurmountable problems, the approach was inconsistent with the project plan to develop instruments and procedures that could be easily used by faculty members for self-assessment purposes.

To meet the criteria of ease of administration and self assessment, and to provide information about classroom dynamics, the idea of feedback on the basis of student perceptions was considered. After discussing the advantages and limitations of that approach, a decision was made to develop a questionnaire to assess opinions of students regarding some of the interaction patterns occurring in classrooms. For example, we wanted to develop a means for faculty to learn if their students feel as though they have the opportunity to participate in class discussion or ask questions; if they participate in class, how frequently they do so, and what reasons they have for choosing not to participate; if they believe any particular individual or group of individuals are given more opportunities to participate than they; and if the instructor calls on them by name or in some other manner. In order to gather this type of information, the Student Perception Questionnaire was developed.

Development of the Student Perception Questionnaire

The following procedures were used to develop the Student Perception Questionnaire:

1. Specific concerns regarding classroom interaction based on a review of the literature were identified and a series of questions were developed.

2. Form I of the questionnaire contained open-ended questions to which students could use their own words to respond. Included were questions such as: "To what extent did you volunteer to respond to questions that were asked of the class by the instructor?", "Were there times you wanted to participate in class by asking a question or making a comment but did not do so? If so, why did you not do so?", "Were there times you raised your hand but did not get called on? How often? Why do you think

you were not recognized?" It was administered to a sample of approximately 125 students from three university classes in December, 1979.

3. Responses from the open-ended questions were analyzed and categorized. Multiple choice alternatives were formulated from those responses and Form II of the questionnaire was developed. This form included an "other" category as one of the choices for each question, along with space for an explanation.

4. Form II was administered to a total of 353 students in one section each of introductory economics and psychology, and two sections of introductory sociology at Utah State University during the seventh week of winter quarter, 1980. The computer was used to provide an item analysis and an analysis of variance of multiple choice alternatives by age and sex for each of the four classes. Race was not used as a variable in this analysis because of insufficient representation from groups other than Caucasian.

5. Responses to the "other" choice on each question were tabulated. This resulted in further modification of wording and multiple choice alternatives.

6. Form III was provided to task force members for further analysis and recommendations. Additional refinements were made for the field review edition.

7. Over 2,000 students in eighteen different classes at six colleges and universities in California completed the questionnaire as part of the field review of the project materials. On the basis of these students' responses and the faculty evaluations of the questionnaire, it was again modified.

From the initial stages of the development of this questionnaire it

was considered important to avoid being obtrusive about looking for differential treatment of students that could reflect sex or ethnic bias. Therefore, questions were formulated to avoid direct sex or ethnic references, other than those asking for demographic information. In the final version, only one question makes a specific reference to males and females.

Student Perception Questionnaire

CURRICULUM ANALYSIS PROJECT FOR SOCIAL SCIENCES

Course _____ Date _____

The attached form asks for your responses to questions relating to this course. Do not put your name on the form or in any way identify yourself. It is important that you remain anonymous. Your instructor will later receive the completed forms in order that the information you provide can be used by her/him for evaluation purposes.

Please answer each question as honestly as possible. Your assistance with this effort to improve education is appreciated.

CURRICULUM ANALYSIS PROJECT FOR SOCIAL SCIENCES

Student Perception Questionnaire

DIRECTIONS: ANSWER EACH OF THE FOLLOWING QUESTIONS. GIVE ONLY ONE ANSWER TO EACH QUESTION. PLACE THE NUMBER CORRESPONDING TO YOUR ANSWER ON THE BLANK TO THE LEFT OF THE QUESTION.

_____1. Age at present time:
(1) 17-20
(2) 21-24
(3) 25-30
(4) 31-40
(5) 41 or more

_____2. Citizenship:
(1) Citizen of the U.S.A.
(2) Noncitizen of the U.S.A.

_____3. If U.S. citizen, what is your race? (If not U.S. citizen, do not answer.)
(1) Caucasian (White American)
(2) Black American
(3) Hispanic (Mexican-American, Puerto Rican, Cuban, etc.)
(4) Native American (North American Indian/Alaskan)
(5) Asian American

_____4. Sex of student:
(1) Male
(2) Female

_____5. This course is:
(1) Required for my academic major
(2) Not in my academic major

_____6. Does your instructor know you by name?
(1) Yes
(2) No
(3) Don't know or uncertain

_____7. How often do you voluntarily answer questions or contribute to class discussions in this class?
(1) Never
(2) One to three times during the course
(3) An average of once a week
(4) An average of two to three times a week
(5) An average of one or more times a day

____8. How often does the instructor call on you or ask you to respond to a question or comment?
(1) Instructor does not call on anyone
(2) One to three times during the course
(3) An average of once a week
(4) An average of two to three times a week or more
(5) Never

____9. How does the instructor most frequently call on you?
(1) By name
(2) By pointing with hand
(3) By eye contact/looking directly at me
(4) Instructor never calls on me

____10. Are there times when you raise your hand to ask a question or make a comment but do <u>not</u> get called on by the instructor?
(1) Once or twice
(2) Three or more times
(3) I am called on when I raise my hand
(4) I never raise my hand

____11. Why do you think the instructor does not call on you when you raise your hand? (Select the <u>one</u> answer which best reflects your opinion.)
(1) Too many students want to respond
(2) Others beat me to it
(3) Instructor does not see or hear me
(4) Instructor ignores me
(5) This situation never occurs

____12. Are there times you want to participate in class by asking a question or making a comment but <u>choose not to do so</u>?
(1) Once or twice
(2) Three or more times
(3) Nearly every day
(4) No, because I participate when I want to
(5) I do not want to participate

____13. If you have wanted to participate in class by asking a question or making a comment but did not do so, what was your reason for not doing so? (Select the <u>one</u> response that most closely corresponds with your feelings.)
(1) Felt insecure, inadequate, or uncertain
(2) Another student asked question or commented first
(3) Too many students in class
(4) Disagreed with instructor but chose not to speak out
(5) This situation never occurs

____14. In your opinion, which students most frequently participate in class? (Select the one answer that best represents your opinion.)
(1) Those who are most knowledgeable or most interested in the subject
(2) Those who are seeking clarification or want more information
(3) Those who are trying to show off or get attention
(4) I have not noticed

____15. In your opinion, which students ask the most questions and make the most comments in class?
(1) Male student(s)
(2) Female student(s)
(3) Male and female students equally
(4) Have not noticed

____16. How does the instructor react to the questions and comments you make in class?
(1) Encourages me to question or comment again
(2) Discourages me from commenting or asking a question again
(3) Neither encourages nor discourages me
(4) I never participate

____17. In your opinion, how does the instructor react to opinions and comments given by other students in the class?
(1) Respects the opinions of students in this class
(2) Does not respect the opinions of students in this class
(3) Embarrasses or "puts down" students for their opinions
(4) I did not notice

____18. Does your instructor use humor or make humorous references that you feel are offensive, embarrassing, or belittling to any individuals or groups?
(1) Never
(2) One time
(3) Occasionally
(4) Frequently

____19. How often do students participate in this class by asking questions or making comments?
(1) Never
(2) Rarely
(3) Occasionally
(4) Frequently

Directions for Use of the Student Perception Questionnaire[1]

The Student Perception Questionnaire contains 19 items designed to gather students' perceptions of selected classroom behaviors. It is a self-assessment tool to provide feedback to instructors regarding the manner in which they interact with class members, and to determine if students perceive the instructor as interacting differently in relation to the sex, race, or age of class members.

The questionnaire can be administered to a class in a fifteen-minute period by the regular instructor or, preferably, by a proxy for that instructor. There is no reason why a member of the class could not be the administrator. It should be administered in a manner that is objective and encourages honest and frank responses from students. It is essential that the anonymity of the respondents be maintained.

The questionnaire is designed to be used in college and university classes of varying size and in various disciplines. If given near the midpoint of a quarter or semester, the feedback received by the instructor could generate appropriate changes.

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[1]The Student Perception Questionnaire may be reproduced for classroom use.

Analysis of the Data

One of the primary questions to be answered by data from the Student Perception Questionnaire is: Does a difference exist in the perceptions of men and women students in regard to classroom interaction patterns? More specific questions addressing this issue are: Is the instructor perceived as calling on both men and women students by name? Is there a difference in the way men and women students perceive humorous references made by the instructor? Is there a difference in students' perceptions of the manner in which the instructor reacts to comments made by men and women students in class? And one of the most potentially revealing questions is: Do men and women students contribute to class discussion in approximately equal numbers, and if not, for what reasons?

These same questions can be addressed in regard to the variables of ethnic membership and age. Obviously, the meaningful use of the variables is dependent on the demographic makeup of each class. Decisions regarding which variables to include in data analysis can be made by the individual instructor based on class membership.

The questions posed by the questionnaire can be analyzed through a frequency distribution giving the number of responses (N) and percentage of responses (%) for each alternative on each question. Responses can be classified by sex, racial or ethnic minority group membership, or age--or by any combination of the three.

Most college and university computer centers are equipped with programs to analyze the data in this manner. Although computer analysis

nas obvious advantages, it is feasible to do a frequency distribution by hand for small classes.

This type of descriptive analysis will yield answers to the questions posed without need of more elaborate statistical techniques. If, however, there is a need or desire to establish whether differences in student responses are statistically significant, additional techniques can be used.

A Student T-test can be used to determine whether statistically significant differences exist between two specific response categories. Also, the analysis of variance is a technique that could be used to determine if statistically significant differences exist among two or more variables.

These techniques can be used to analyze a specific class. They can also be used to compare the perceptions of students in each of the classes that an instructor teaches. For example, an instructor could assess whether classroom interaction is perceived differently by students in academic major courses than those in general education courses, by students in upper compared to lower division courses, and by students in small discussion groups versus those in large lecture courses.

Interpretation of Results

In interpreting the results it must be remembered that the responses are opinions or perceptions and may or may not be consistent with fact. For example, some questions ask about the comparative participation in class of men and women students. If the purpose was the accurate quantification of the relative contributions of the two sexes, one would proceed quite differently. However, there may be value in learning who students think participate most frequently and why. The instructor can then analyze the reasons for these perceptions.

It is also important to realize that students could accurately perceive what occurs in a class but neither know nor understand why. For example, if a particular student has actually dominated discussion and negatively influenced the progress or atmosphere of a class, the instructor might have consciously attempted to extinguish such behavior through lack of positive reinforcement or even through aversive tactics. Students might then perceive the instructor's behaviors as negative and reflect that perception in the questionnaire without fully understanding the instructor's purpose.

It is, therefore, again emphasized that this questionnaire is a self-assessment tool for the students to convey their perceptions. Within these contraints it is a tool through which instructors can better understand some of the attitudes of their students, and for instructors to become more sensitive to some of their own classroom behaviors and the attitudes such behaviors may reflect or generate.

To facilitate the interpretation of the questionnaire results, questions have been grouped into three sections:

Demographic information	(questions 1-5)
Faculty patterns of communication	(questions 6, 8, 9, 11, 16, 17, 18)
Student participation	(questions 7, 10, 12, 13, 14, 15, 19)

Factors which may be important to consider in interpreting results of the questionnaire include: (1) the proportion of women and men in the class; (2) ethnic composition of the class; (3) format (i.e., lecture, discussion, seminar); (4) class size; (5) classroom environment; and (6) expectations of faculty and students concerning interaction patterns. These factors may be interrelated in a variety of ways. The proportion of women in the class might be substantially higher than the proportion of men, but the majority of women and men in the class might see men and women as participating equally. This indicates participation rates may be proportionately lower for women than men (Question 15). When responses to questions which are addressed to the individual's own participation rates are analyzed, it may be found that different ethnic or age groups of men and women have varying participation rates. Older black women might have the lowest self-reported participation rates and young white men the highest. Even if such an ethnic breakdown is not feasible in a class, other patterns may emerge. For example, results compiled from some classes in the field test indicated that a larger proportion of women than men responded that they never volunteered in class (Question 7, Response 1). Also they were never called on by the instructor (question 9, response 4); never raised their hand (question 10, response 4); did not want to participate

(question 12, response 5); and never participated (question 16, response 4). At the same time, there may also be a segment of female students who indicate as high or higher participation rates as male students (question 7, response 5; question 8, response 4; question).

The aim of the questionnaire is to examine ways in which students perceive interaction between students and faculty in the classroom. Many other dimensions of communication in the educational environment could be examined. Examples are: student-student interaction in the classroom, faculty-student interaction outside the classroom, and faculty-faculty interaction. All these areas could not be covered within the scope of this project. Faculty, however, may want to add questions of their own to explore some of these ideas. They may also want to discuss the questionnaire results with students. By calling differences in perceived participation to the attention of students, the goal of more equitable participation may be achieved. Focusing on the issue of interaction itself may be very revealing of important aspects of the college learning experience to both students and faculty. One faculty member who participated in the field test indicated that just administering the questionnaire seemed to increase the overall rate of student participation.

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